Operating Instructions

STEREO FILE-TYPE CD CASSETTE DECK RECEIVER

XR-P970F

XR-P770F

SPEAKER SYSTEM

S-P770V

CENTER AND SURROUND SPEAKER

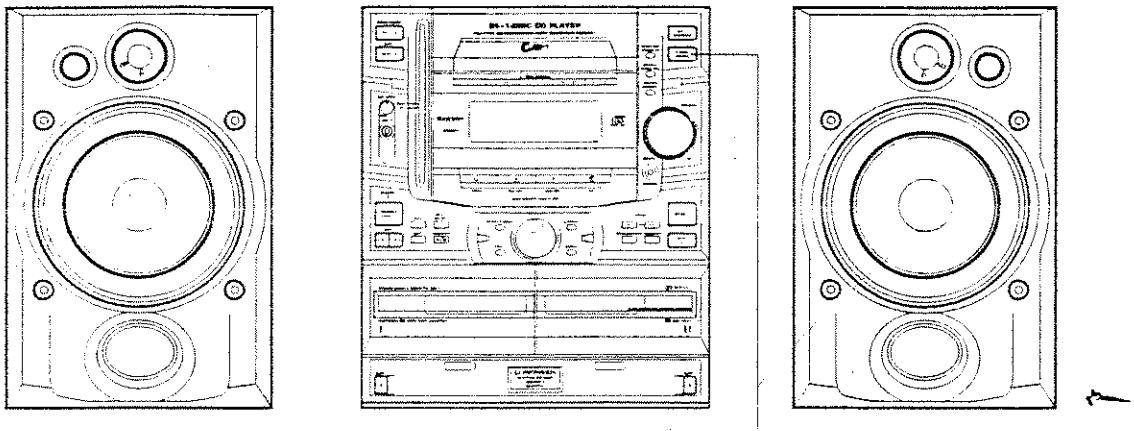
S-P33LRC*

COMPACT disc DIGITAL AUDIO

25+1 DISC

SPARE PARTS MASTER

*...S-P33LRC is supplied with the model XR-P970F only.



The illustration shows XR-P970F.

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

DEMO FUNCTION

If you connect the power plug to a wall outlet, power to the unit switches ON, and DEMO mode operation starts. And if the P.BASS (DEMO) button is pressed for about 3 seconds when the power is OFF, the demonstration mode will be selected and power will be turned ON automatically.

- To cancel the DEMO mode, press buttons on the main unit or remote control related to switching power ON, or the P.BASS (DEMO) button on the main unit for about 3 seconds.
- To cancel the DEMO mode when the power supply plug is connected to the wall socket, press the P.BASS (DEMO) button for about 3 seconds while DEMO mode indications are displayed.

PIONEER®

The Art of Entertainment

IMPORTANT

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

[FOR U.K. AND EUROPEAN MODELS]

CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product.
Refer all servicing to qualified personnel.

The following caution label appears on your unit.

Location: rear of the unit

CLASS 1
LASER PRODUCT

Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

THE POWER SWITCH IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION.

This product complies with the Low Voltage Directive (73/23/EEC), EMC Directives (89/336/EEC, 92/31/EEC) and CE Marking Directive (93/68/EEC).

[FOR U.S. MODEL]

CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiates radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.

— Increase the separation between the equipment and receiver.

— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

— Consult the dealer or an experienced radio/TV technician for help.

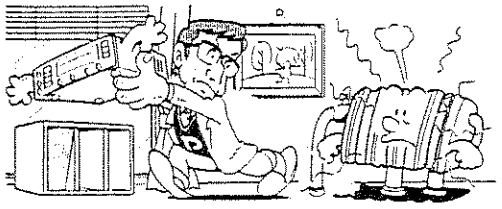
CONTENTS

CAUTIONS REGARDING HANDLING 3
CONFIRM SUPPLIED ACCESSORIES 4
LOADING BATTERIES INTO REMOTE CONTROL UNIT 4
REMOTE CONTROL OPERATIONS 4
CONNECTIONS 5
FRONT PANEL FACILITIES 7
SETTING THE CLOCK 10
TURNING ON THE POWER 11
Turning power ON without using the POWER switch 11
TUNING INTO STATIONS 11
Beat cut function 11
MEMORIZING STATIONS 12
Manual presetting 12
Station call 12
CAUTIONS REGARDING COMPACT DISC HANDLING 13
HOW TO HANDLE CASSETTE TAPES 13
READ THIS BEFORE OPERATING THE CD PLAYER 14
LISTENING TO COMPACT DISCS 14
Before operating the player 14
Listening to tracks in order from the first track 15
Select the disc play mode 15
CONVENIENT CD FUNCTIONS 16
To play back desired tracks 16
Best selection memory 16
Programmed play 17
To repeat playback (Repeat play) 18
Random play 18
Fast track search (Hi-Lite Scan) 19
Previous disc scan 19
Changing the display 19
Disc title memory 20
PLAYING TAPES 21
Basic operation 21
Music search 21
RECORDING 22
Recording on tape 22
Copying a tape 22
A.S.E.S. (Auto Synchro Editing System) 23
SURROUND MODE 24
SOUND FIELD CONTROL (SFC) OPERATION 25
Selecting a preset sound setting 25
Boosting the bass sound 25
USING DOLBY SURROUND SOUND (XR-P970F ONLY) 25
FUN WITH KARAOKE FUNCTIONS 27
WAKE-UP TIMER 28
Setting the wake-up timer 28
TIMER RECORDING 29
Timer recording setting 29
SLEEP TIMER 29
CONNECTING ANOTHER UNIT TO THIS UNIT 30
MAINTENANCE 30
TROUBLESHOOTING 31
SPECIFICATIONS ..... Back cover

CAUTIONS REGARDING HANDLING

Location

Install the unit in a well-ventilated location where it will not be exposed to high temperatures or humidity.
Do not install the unit in a location which is exposed to direct rays of the sun, or near hot appliances or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the unit in a damp or dusty environment may result in a malfunction or accident. (Also avoid installation near cookers, etc., where the unit may be exposed to smoke from oil, steam, or heat.)
Do not install the unit on a tottered stand, nor on an unstable or inclined surface.



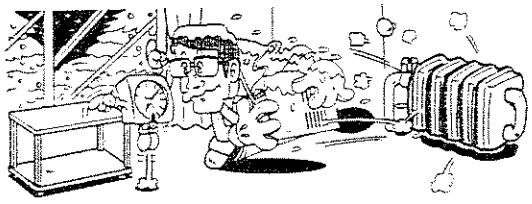
Precautions regarding installation

- Placing and using the unit for long periods on heat-generating sources will affect performance. Avoid placing the unit on heat-generating sources.
- Install the unit as far away as possible from your TV. Installation in close proximity to such equipment may cause noise or degradation of the picture.
- Such noise may be particularly noticeable when an indoor antenna is used. In such cases, make use of an outdoor antenna, or turn off the power of the unit.
- Please place this unit on a level surface.

There is a vent for the cooling fan on the rear of this unit. Blocking or obstructing this vent may result in faulty operation, so make sure there is a space of at least 15 cm between the rear of the unit and the wall or other surface.

Condensation

When this unit is brought into a warm room from previously cold surroundings or when the room temperature rises sharply, condensation may form inside and the unit may not be able to attain its full performance. To prevent this, allow the unit to stand for about an hour before switching it on or raise the room temperature gradually.

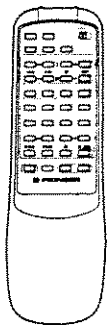


This product is for general household purposes. Any failure due to use for other than household purposes (such as long- term use for business purposes in a restaurant or use in a car or ship) and which requires repair will be charged for even during the warranty period.

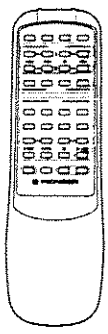
CONFIRM SUPPLIED ACCESSORIES

Remoto control unit x 1

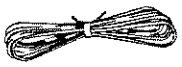
XR-P970F



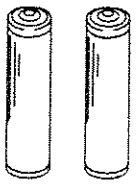
XR-P770F



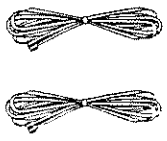
FM antenna x 1



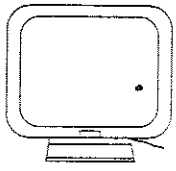
AA/R6P dry cell batteries x 2



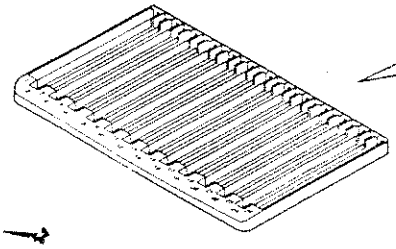
Speaker cords x 2
(Supplied with speaker system)

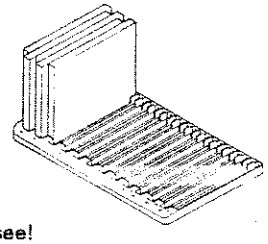


AM loop antenna x 1



CD case stand x 1

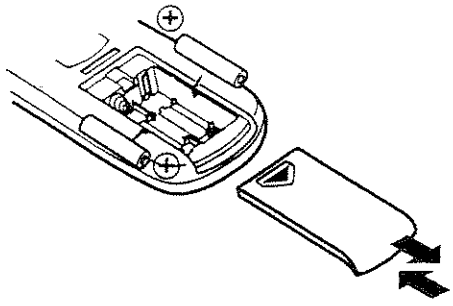




I see!
It's convenient to match the disc case number with the number of the disc loaded in the unit.

Note!!
Some disc cases (like two-disc cases) may not fit.

LOADING BATTERIES INTO REMOTE CONTROL UNIT



Open the battery compartment cover on the back of the remote control unit.
Insert size AA/R6P dry cell batteries into the battery compartment in accordance with the indications (⊕, ⊖) inside the compartment.
Close the cover of the battery case.

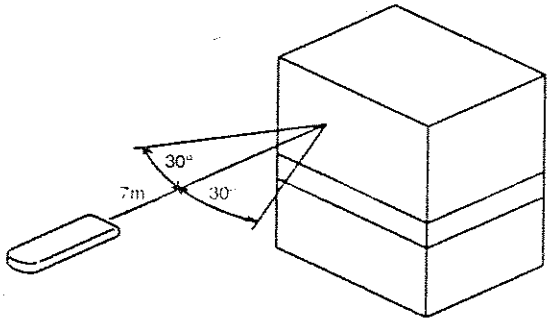
Incorrect use of batteries may lead to leakage or rupture. Always be sure to follow these guidelines:

A. Always insert batteries into the battery compartment, correctly matching the positive ⊕ and negative ⊖ polarities, as shown by the display inside the compartment.
B. Never mix new and used batteries.
C. Batteries of the same size may have different voltages, depending on brand. Do not mix different brands of batteries.

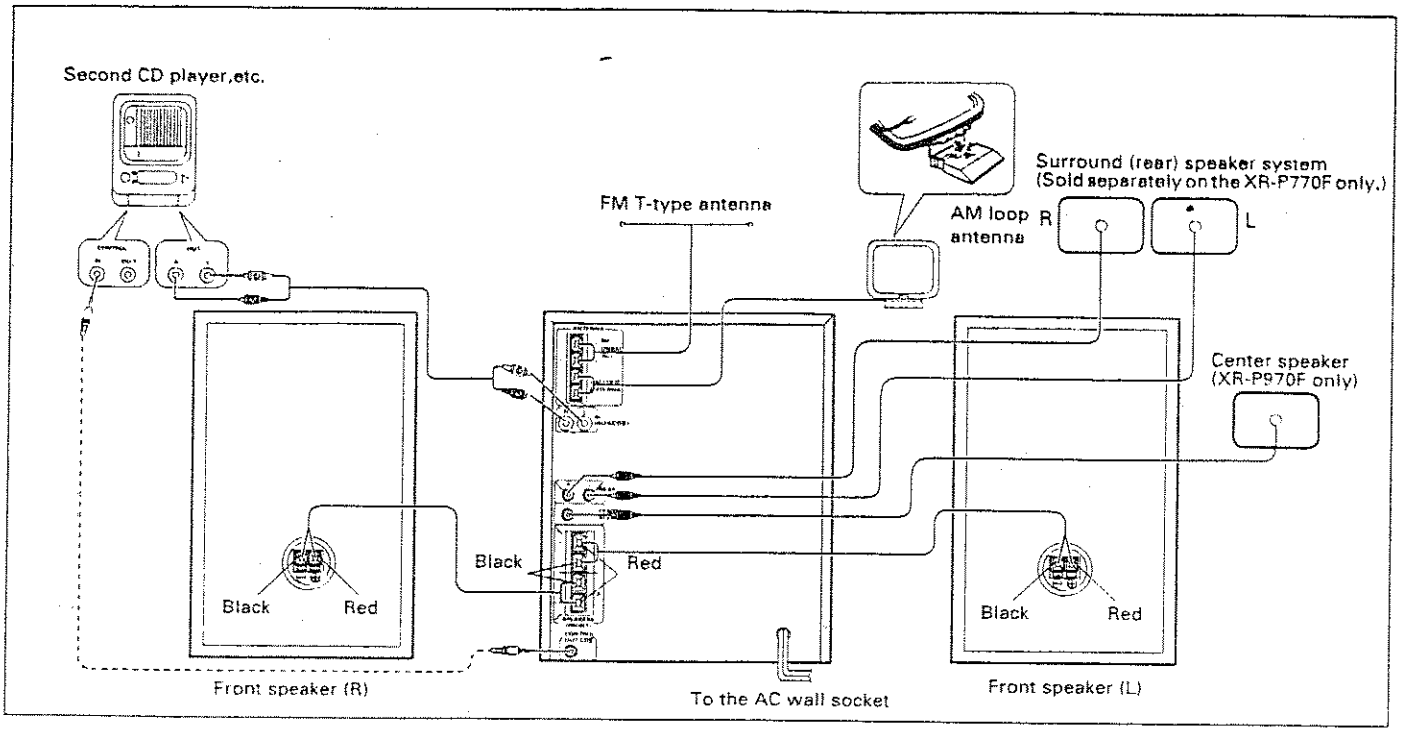
REMOTE CONTROL OPERATIONS

The remote control unit can be used within a range of approx. 7 meters from the remote sensor, and within angles of up to approx. 30 degrees.

- If the remote control sensor window is in a position where it receives strong light such as sunlight or fluorescent light, control may not be possible.



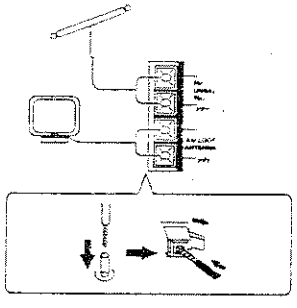
CONNECTIONS



Before making or changing the connections, switch off the power switch and disconnect the power cord from the AC outlet.

- **Use this unit on a flat surface.**
- Be sure to connect an antenna. If you do not, broadcast signal reception will not be possible.

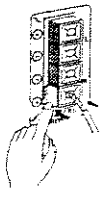
1. **Connect AM loop antenna and FM antenna to the unit's antenna terminals.**



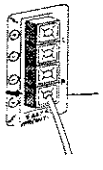
2. **Connect the speaker cords to the SPEAKERS terminal.**
   Connect the "+" terminals on the CD cassette deck receiver to the "+" terminals on the speakers, the "–" terminals on the CD cassette deck receiver to the "–" terminals on the speakers.

① **Twist the wire strands.**

② **Push away the tab and insert the cord into the terminal.**



③ **Pull back the tab. Be sure to tighten the cords firmly.**



NOTE:
Do not allow the conductors of the cords to project out of the terminals or to come into contact with other conductors. A breakdown or failure may occur when conductors touch.

Notes for S-P770V:

- *This speaker system is magnetically shielded.*
  However, depending on the installation location, color distortion may occur if the speaker system is installed extremely close to the screen of a television set.
  If this happens, turn off the power switch of the television set, and then turn it on after 15 to 30 minutes.
  If the problem persists, place the speaker system away from the television set.

Lubrication is used in this unit's speakers. Do not touch it with your hands or a cloth as this may degrade performance. If you do get the lubrication on your hands, immediately wash it off with detergent.

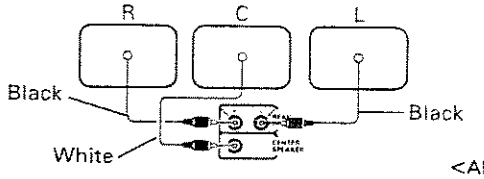
Speaker impedance
Connect speaker systems with a nominal impedance range from 8 Ω to 16 Ω.

Surround (rear) speaker systems and center speaker system connection (Sold separately on the XR-P770F only.) (center speaker available on XR-P970F only)

- Connect the plugs properly.
  Use speaker systems equipped with standard RCA pin plugs.

XR-P770F only:
Surround (rear) speakers must have a nominal impedance of 16 Ω or more.

XR-P970F only:
Surround (rear) speakers must have a nominal impedance of 8 Ω or more.
Center speaker must have a nominal impedance of 4 Ω or more.



When mounting center and surround (rear) speaker system on a wall

- Use the hole located on the rear panel of the speaker to mount it on a wall. Make sure the speakers will not drop when they are mounted on a wall.
- Check if the wall is strong enough to hang the speakers on it. PIONEER disclaims the responsibility for damages due to dropping of the speakers and other accidents, which are caused by inappropriate strength of the wall or improper installation.
- No screws or other fittings are supplied to mount the speaker on the wall.

Precaution for the S-P33LRC

Do not connect this speaker to any amplifier other than the one supplied with this system. Connection to any other amplifier may result in a malfunction or a fire.

3. Connecting an additional CD player

- Connect this unit's AUX/CD II input jack to the CD player's output jack using a regular audio cord available in stores.
- When connecting a Pioneer CD player with a control out CD II jack, connect this unit's control out CD II jack to the CD player's control input jack using an audio cord with a miniplug (no resistor).

You can use this unit's infrared sensor for remote control of the connected CD player.

5. Finally, plug the power cord into the AC wall outlet.

NOTE:

Insert the plugs securely into the jacks. Improper connection can lead to sound distortion or malfunction.

ANTENNA CONNECTIONS

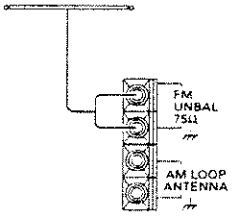
Radio reception is not possible unless the antenna is properly connected.

The strength of broadcast signals varies from one area to another. Signal propagation is especially poor in metropolitan areas, where there are many tall buildings and in mountainous areas. Proper antenna installation is vital to good reception.

FM ANTENNA

FM T-type antenna

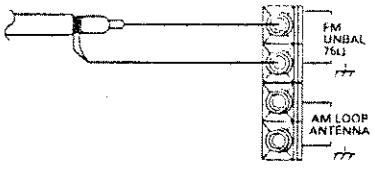
Stretch the antenna and affix it to a wall, etc.



External FM antenna installation

Use an external antenna when the signals from the stations are weak and cannot be picked up by the accessory FM antenna, or when the sound heard is accompanied by too much noise.

Connect a 75 Ω coaxial cable.



Connect the shield wire to GND (ground).

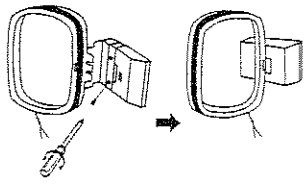
AM ANTENNA

The antenna should be placed at a distance from this unit, and should not be allowed to touch metallic objects. Avoid placing it near CD players, personal computers, television sets and other devices generating radio frequencies.

- Place the antenna on a level surface and rotate it to find the orientation that yields the best reception.

To attach the antenna to a wall, etc.

1. Select the place that yields the best reception.
2. Screw the leg to the wall, etc.
3. Insert the clip on the bottom of the antenna into the groove on the leg.



External AM antenna

Indoor AM antenna

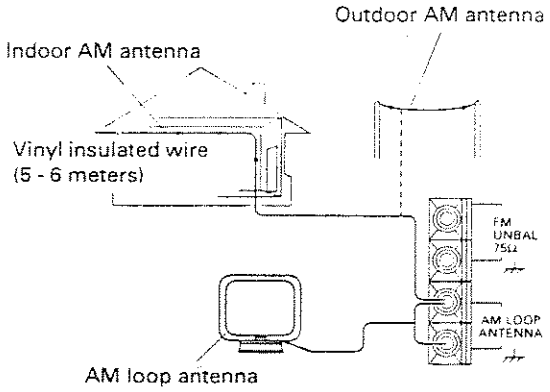
Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

Outdoor AM antenna

If reception is still poor even when a lead antenna has been fully extended indoors, stretch out a vinyl-coated wire and secure it outdoors.

NOTE:

Do not detach the AM loop antenna when using the external AM antenna.



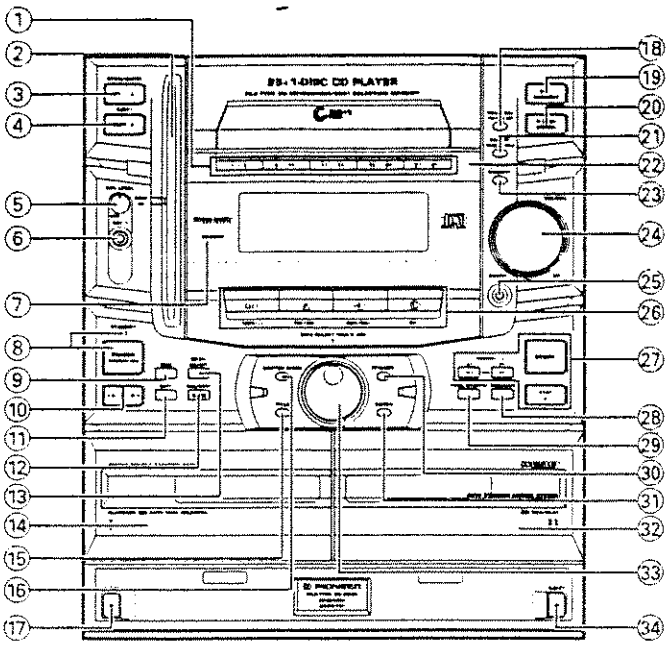
The ⏚ (signal earth) helps reduce noise when an antenna is connected. It is not a safety earth.

When moving the unit

Remove all the discs, and then unplug the power cord from the wall socket about 10 seconds after a CD has stopped playing.

- Leaving discs in the rack when you move it may result in damage.
- When packing the unit or removing it from its box, be sure not to touch the front.

FRONT PANEL FACILITIES



The illustration shows XR-P970F.

① **5-DISC ACCESS button**

② **Plus 1 disc slot**

③ **25 OPEN/CLOSE button**

④ **SLOT EJECT button**

⑤ **Microphone level (MIC LEVEL)**

⑥ **Microphone jack**
The XR-P770F features two mic jacks.

⑦ **Remote sensor**

⑧ **POWER STANDBY/ON switch and STANDBY indicator**
This is the switch for electric power.

ON : When set to the ON position, power is supplied and the unit becomes operational.

STANDBY : When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. (The STANDBY indicator lights.)

⑨ **ASES button**

⑩ **BEST (A, B) button**

⑪ **COPY button**

⑫ **REC/STOP button (●/■)**

⑬ **Dolby* NR ON/OFF button**
Each time this button is pressed, the Dolby NR system turns on and off.

⑭ **TAPE I cassette door**

⑮ **TITLE button**

⑯ **CENTER MODE button (XR-P970F only)**

⑰ **TAPE I Eject button (⏏)**

**.....This knob is used for multi-functions.

⑱ **TIMER REC/WAKE-UP button**

⑲ **SFC/KARAOKE button**
Each time this button is pressed, the mode changes in the following sequence:

HALL → MOVIE → LIVE → DISCO → KARAOKE → off → HALL

NOTE:
If KARAOKE is selected, the vocal part in songs is muted and only the instrumental accompaniment (backup) is played.

⑳ **P.BASS (DEMO) button**

㉑ **DISPLAY CLOCK ADJ button**

㉒ **Door panel**

㉓ **STATION MEMORY button**

㉔ **VOLUME control**

㉕ **Headphones jack (PHONES)**

㉖ **Function buttons**

㉗ **Common operation button section (Refer to page 8)**

㉘ **PROGRAM button**

㉙ **FREQ/STATION button**

㉚ **DD MODE button (XR-P970F only)**

㉛ **ENTER button**

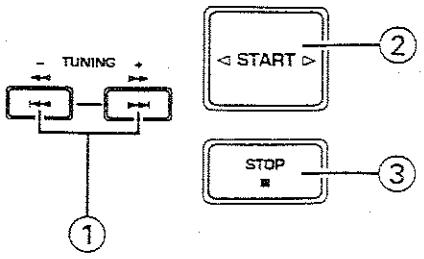
㉜ **TAPE II cassette door**

㉝ **DISC SELECT/MULTI JOG** knob**

㉞ **TAPE II Eject button (⏏)**

* *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
* *"DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.*

Common operation button section



① ⊟, ⊟ buttons

② START button (◄ ►)

③ STOP button (■)

- Roles of the common operation buttons (The roles of the buttons vary depending on the input functions as shown below.)

During CD input

START	:	Play/pause button
STOP	:	Stop button
⊟	:	Fast forward/track search button
⊟	:	Fast reverse/track search button

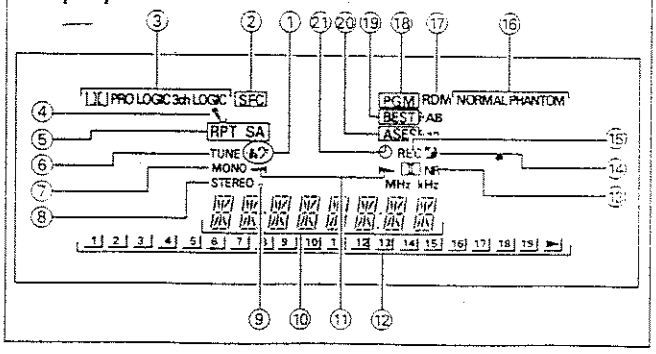
During cassette deck input

START	:	Play button/Tape transport direction
STOP	:	Stop button
⊟	:	Fast forward/Review button
⊟	:	Rewind/Review button

During tuner operation

⊟	:	Frequency Up button
⊟	:	Frequency Down button

Display



① Lights when you press the P.BASS button.

② Lights during SFC mode operation.

③ Lights during Dolby Pro Logic* or 3ch Logic. (XR-P970F only)

④ Lights during KARAOKE mode operation.

⑤ RPT : Lights during repeat play.
S : Lights during SINGLE mode operation.
A : Lights during ALL mode operation.

⑥ Lights during radio broadcast reception.

⑦ Lights when you press the MONO button.

⑧ Lights during FM stereo reception.

⑨ Lights when setting the Beat Cut function.

⑩ Indicates frequency and major operation status.

⑪ Lights to show tape direction.

⑫ Displays a CD track number. Playing track number and waiting track numbers are displayed. In program play, lights the programmed tracks. ► lights when programmed tracks are more than 20.

⑬ Lights when Dolby NR is ON.

⑭ Lights during sleep timer operation.

⑮ Lights during recording and timer recording operation.

⑯ Lights during Dolby Surround Center Mode.
Fixed to NORMAL position in Dolby 3ch Logic. (XR-P970F only)

⑰ Lights when you press the RANDOM button.

⑱ Lights when you press the PGM button.

⑲ Flashes during Best Selection setting (A or B), and lights during play.

⑳ Lights when setting up A.S.E.S.

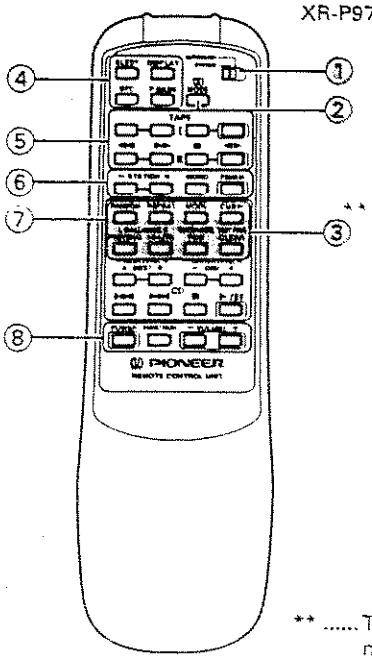
㉑ Lights when setting the timer.

*

Manufactured under license from Dolby Laboratories Licensing Corporation.
DOLBY, the double-D symbol and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

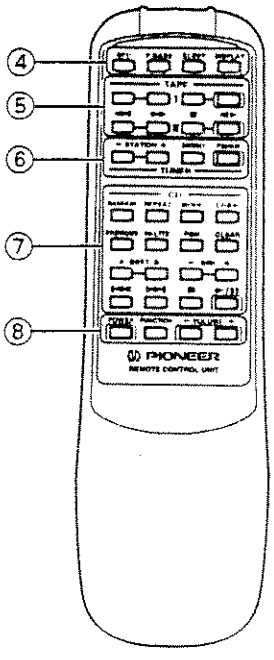
REMOTE CONTROL UNIT

XR-P970F



** .....This button is used for multi-functions.

XR-P770F

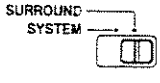


The following instructions concern the XR-P970F.

① SYSTEM/SURROUND selector

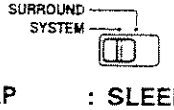
② ◻◻ MODE: (Dolby) MODE button

③ These buttons function when the SYSTEM/SURROUND selector ① is switched to SURROUND.



L BALANCE R	:	BALANCE L, R buttons
CENTER MODE	:	CENTER MODE button
TEST TONE	:	TEST TONE button
– CENTER LEVEL +	:	CENTER LEVEL (+, –) buttons
– REAR LEVEL +	:	REAR LEVEL (+, –) buttons

The following instructions are for both the XR-P970F and the XR-P770F.
With the XR-P970F, switch the SYSTEM/SURROUND selector ① to SYSTEM.



④ SLEEP	:	SLEEP button
DISPLAY	:	DISPLAY button
SFC	:	SFC button
P.BASS	:	P.BASS button

⑤ TAPE I, II operation buttons
(Play ◄ ►, Stop ■, Fast ◄◄ ►►)

⑥ STATION – (down), + (up) buttons
Before operation, memorize broadcast stations with the STATION –, + buttons.
+ ..... Stations change in order in the upward direction.
– ..... Stations change in order in the downward direction.

MONO	:	MONO button
FM/AM	:	FM/AM band button

⑦ RANDOM	:	RANDOM button
REPEAT	:	REPEAT button
MODE	:	CD MODE button
CD II ►	:	CD II play button (Refer to page 30 for details.)
PREVIOUS	:	PREVIOUS button
HI-LITE	:	HI-LITE button
PGM	:	Program button
CLR	:	Clear button
A BEST B	:	BEST (A, B) button
–DISC+	:	DISC (–, +) buttons

CD operation buttons
(Play/Pause ►/II, Stop ■, Track search |◄◄ ►►|)

⑧ POWER button
FUNCTION : FUNCTION button
Each time this button is pressed, the function changes in the following sequence:

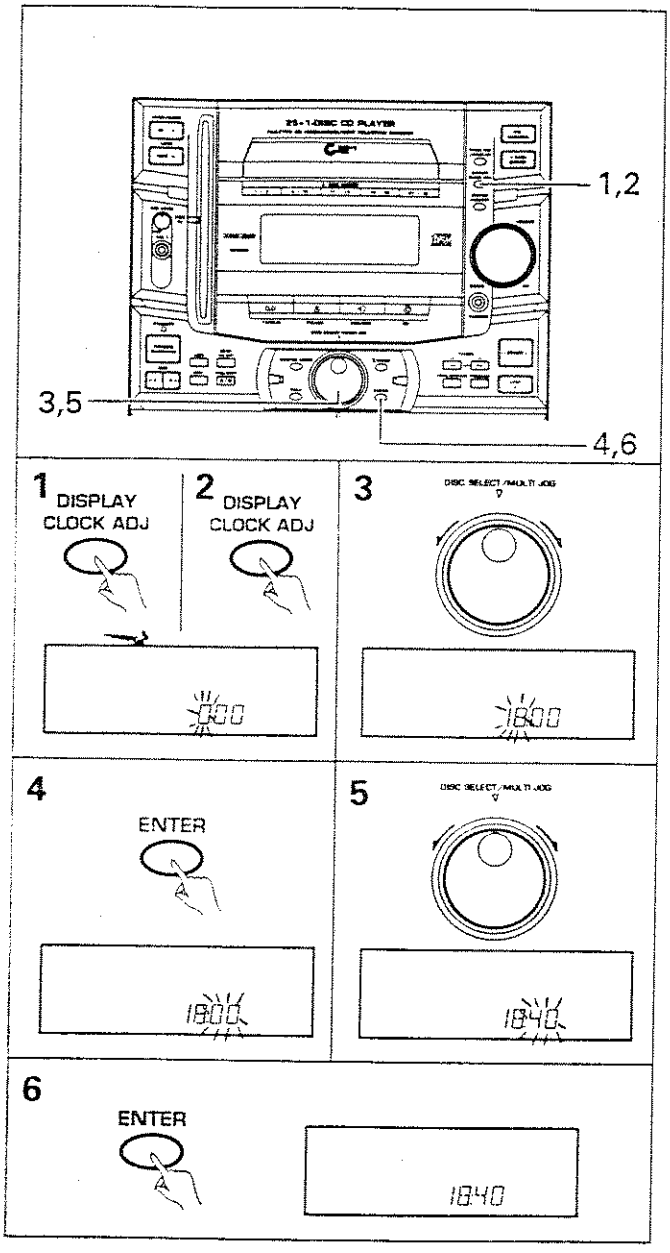
CD → TAPE I/II → FM/AM → AUX/CD II → CD

VOLUME + (up), – (down) button
Increases/decreases the sound volume of the unit.

SETTING THE CLOCK

- Set the clock when it has been incorrectly set or when power has been cut to the unit.
- This clock provides a 24 hour display.
- The clock cannot be set by the remote control unit.

- **Example : Setting the clock to 18:40**



1. **Turn the power switch off and press the DISPLAY/CLOCK ADJ button.**
2. **Keep pressing the DISPLAY CLOCK ADJ button for more than 5 seconds.**
3. **Set the hour by turning the MULTI JOG.**
4. **Press the ENTER button.**
5. **Set the minutes by turning the MULTI JOG.**
6. **Press the ENTER button, when "00" seconds of that minute are reached for precise adjustment.**

- After connecting to an AC outlet, be sure to set the present time. Timer playback and timer recording are not possible unless the time has been set.

To check the current time
When power is switched OFF, press the DISPLAY CLOCK ADJ button.
The current time is displayed for about five seconds.

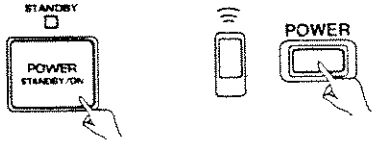
TURNING ON THE POWER

Operations indicated by the [ ] mark are performed with the remote control unit.

For remote control operation with the XR-P970F, ignore "USING DOLBY SURROUND SOUND (XR-P970F only)" on page 26. Instead, switch the SYSTEM/SURROUND selector to SYSTEM.

- Read "CONNECTIONS" again and ensure that speakers, antenna, etc., are connected properly.

Press the POWER switch.

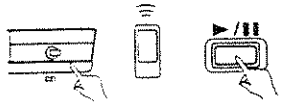
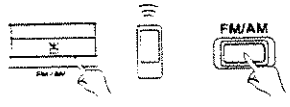
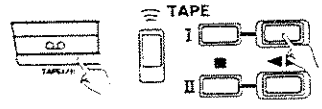
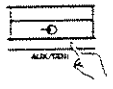
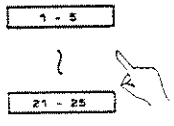


To switch the power OFF:

Press the POWER switch again and the STANDBY indicator lights.
You cannot see the clock display in this unit.
Press the DISPLAY CLOCK ADJ button to see the clock display.

Turning power ON without using the POWER switch

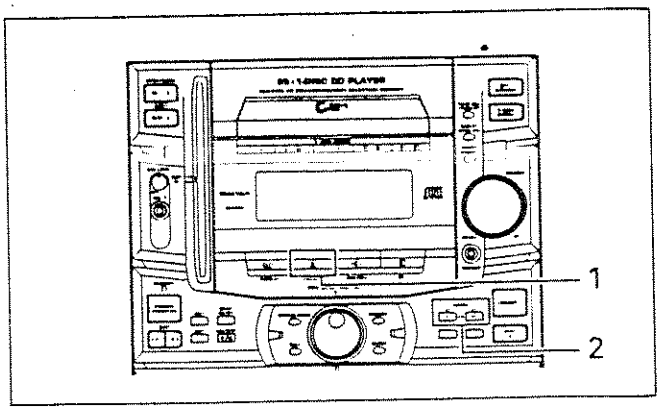
Performing any of the following operations while the system power is off (STANDBY) turns the power ON.

	If a CD has been loaded, it starts to play.
	The tuner (radio) input is selected.
	If a cassette tape has been loaded, it starts to play.
	If the connected component is operating, it starts to play.
	Play starts if there is a CD in the selected 5-disc access.
	The function which has been selected before the last time the power was switched off is selected and the corresponding operation starts.

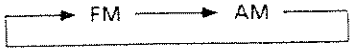
- When power is OFF (Standby), press the SLOT EJECT button, and power switches ON, letting you remove a disc. Also, when power is OFF (Standby), if you load a CD in the Plus 1 Disc Slot, power automatically switches ON, and play starts.

TUNING INTO STATIONS

- Be sure to connect the antennas.
- Do not place the AM antenna on a metallic case including the receiver cabinet or near a CD player, LD player, DAT recorder, personal computer or TV set. Any of these installations will cause noise in reception.



1. **Press the tuner (FM/AM) function button.**
   Select the FM or AM broadcasting band.
   Each time you press this button, FM and AM changes alternately.



2. **Tune in the desired station by pressing the [ ] or [ ] button.**

- **Manual tuning**
  Tap the [ ] or [ ] button in quick repetitions.

- **Auto tuning**
  Press the [ ] or [ ] button for a second or two and remove your finger from it when the frequency starts to change.
  →The frequency changes automatically. When a station is received, the frequency stops changing and "TUNED" appears on the display.

- **High-speed manual tuning**
  Press and hold the [ ] or [ ] button.
  →The frequency changes continuously and stops when your finger is removed from the button.

MONO button (Remote control unit only)

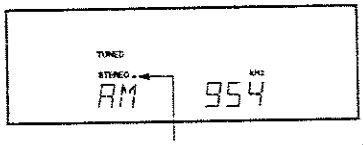
During FM reception: Switches between stereo and monaural modes when listening to a stereo broadcast. If there is a lot of noise in the stereo position, switch to MONO, and the noise will be suppressed.

Beat cut function

If noise occurs during recording an AM broadcast, perform the following procedures to reduce the noise.

1. **Press the POWER switch on this unit so that the STANDBY indicator lights up.**
2. **Turn on the power while pressing the STATION MEMORY button. (The BEAT CUT indicator lights.)**

- To cancel the BEAT CUT function, repeat steps 1 and 2.



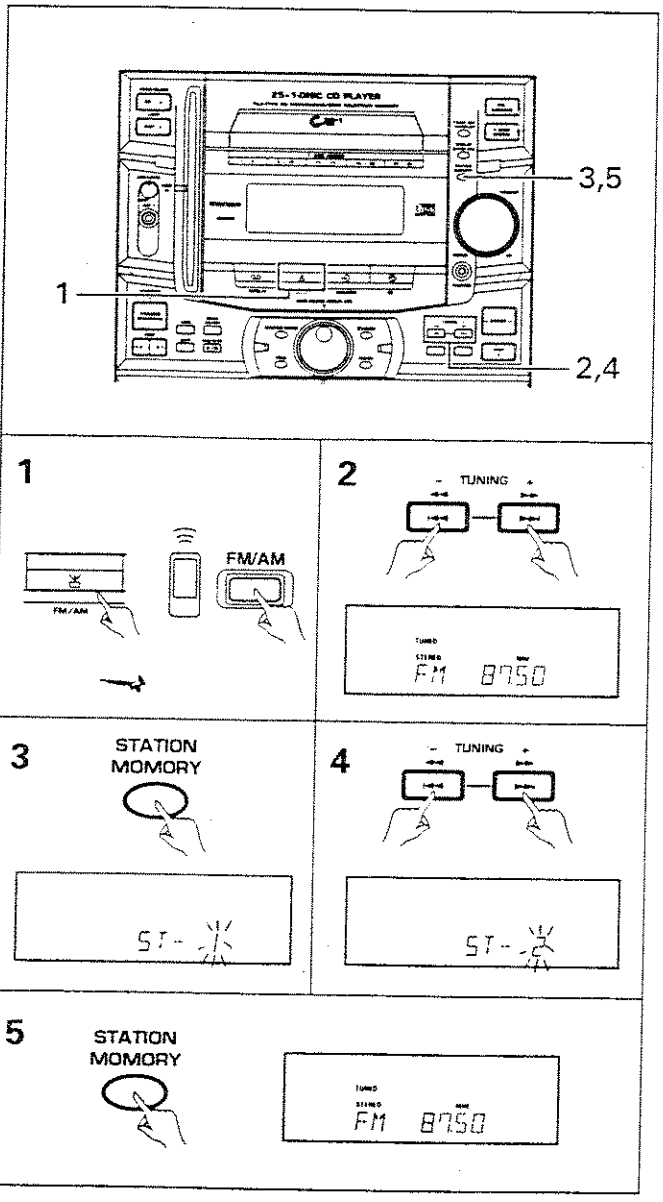
BEAT CUT indicator lights.

MEMORIZING STATIONS

Manual presetting

- Up to 24 FM/AM stations can be memorized at random.

Example : To memorize FM 87.50 MHz as preset station 2.

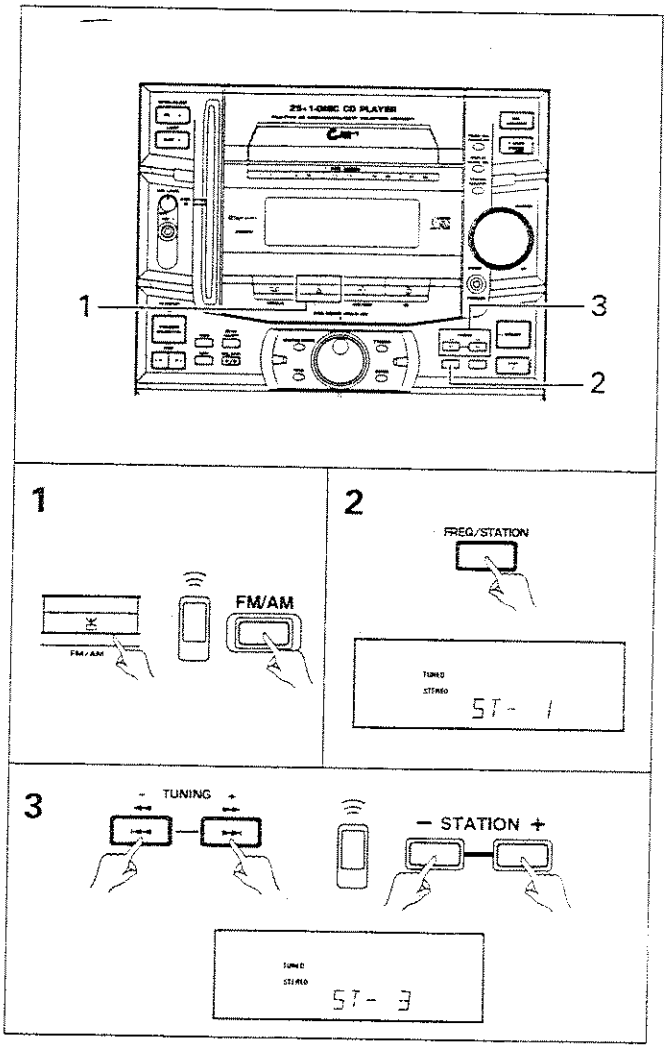


1. **Press the tuner (FM/AM) function button.**
2. **Tune into a desired broadcast station using the ⟶ or ⟵ button.**
   The ON/OFF setting of MONO button can also be memorized for each station set.
3. **Press the STATION MEMORY button.**
4. **Select the station number to be memorized by pressing the ⟶ or ⟵ button.**
5. **Press the STATION MEMORY button.**

NOTE:

If you memorize a station using a station number that already has a station assigned to it, the previous station is erased and the new one memorized.

Station call



1. **Press the tuner (FM/AM) function button.**
2. **Press the FREQ/STATION button to change the display to the station mode.**
   Each time you press the button alternately, the frequency and station mode changes as follows:

   ⟶ Frequency ⟶ Station mode ⟶

   If you do not press a button within three seconds, you return to the Frequency mode.
3. **Press the ⟶ or ⟵ button to select the desired station.**

NOTES:

- *The memorized stations will not be erased even if the power is turned off. However, if the AC power cord is unplugged or a power failure occurs, the memorized stations will be erased. (If the AC power cord is unplugged, the memorized stations will be retained for several days.)*
- *If the memorized stations have been erased, memorize them again.*

CAUTIONS REGARDING COMPACT DISC HANDLING

CARE OF DISCS

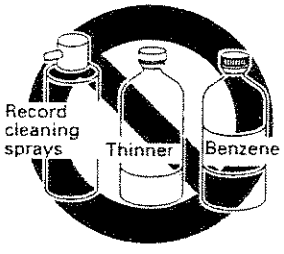
- When holding discs, do not touch their signal surfaces.
- Do not affix gummed labels or tape to the label surfaces. Also, do not scratch or damage the disc.
- Discs rotate at high speed inside the player. Do not use damaged (cracked or warped) discs.
- Never rub the disc surface with force.

STORING DISCS

- Always store discs in their cases vertically, avoiding locations with high heat or humidity, or extremely low temperatures.
- Always read and abide by the precautionary notes listed on the disc labels.

CLEANING DISCS

- Fingerprints or smudges on the surface of a disc will not directly affect the recorded signals. Always keep your discs clean by wiping them gently with a soft cloth from the inner edge toward the outer periphery.
- If a disc becomes very dirty, dip a soft cloth in water, and after wringing it out well, wipe the dirt away gently. Remove any water drops with another soft, dry cloth.
- Do not use record cleaning sprays or anti-static agents on discs. Never clean discs with benzene, thinner, or other volatile solvents, since damage to the disc surface may result.



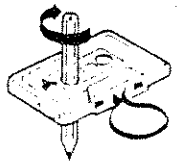
CD LENS CLEANER

The player's pickup lens should not become dirty in normal use, but if for some reason it should malfunction due to soiling, consult your nearest PIONEER authorized service center. Lens cleaners for CD players are commercially available, but special care should be exercised in their use since some may cause damage to the lens.

HOW TO HANDLE CASSETTE TAPES

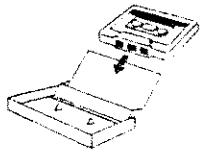
Is the tape loose, or is some of the tape sticking out of the cassette?

This will damage the tape itself. To remove the slack, insert a pencil into the spool and gently wind it.



Safekeeping

Put the cassette tape back into its case and store it in a location not exposed to magnetic field, humidity, dust, or oil.



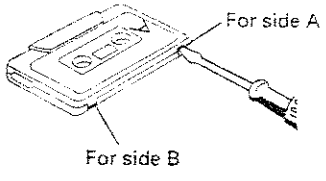
TIPS ON USING CASSETTE TAPES

- Leader tape (which does not allow sound to be recorded over it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for approx. 5 seconds so that the leader tape clears the recording head.
- Forwarding or reversing the cassette tapes before recording prevents shock to the unit caused by slack.

Do not use tapes of more than 90 minutes.
Since tapes of more than 90 minutes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other trouble such as irregular winding. Try not to use them with this unit.

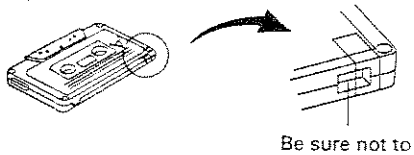
How can you prevent accidental erasure?

When the tab on the cassette shell is broken out with the tip of a screwdriver, it will not be possible to activate the recording function even by pressing the ●/■ button, so valuable recordings will not be erased in error.



When you want to record again on a cassette with broken erasure prevention tabs, cover the hole with a double layer of adhesive tape.

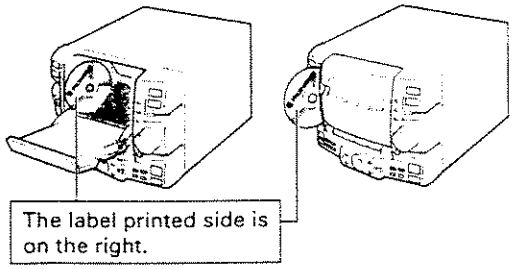
With TYPE II (HIGH/CrO_2) tape, be sure not to cover the tape-type detection holes.
If they are covered, the auto tape selector function will not operate correctly.



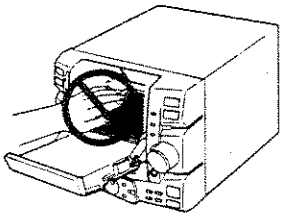
Be sure not to cover the tape-type detection holes.

READ THIS BEFORE OPERATING THE CD PLAYER

- Press the 25 OPEN/CLOSE button and the door panel opens automatically. Press the button again, and the door panel automatically closes.
- When loading a disc in the Plus 1 Disc Slot or rack, **make sure the label side of the disc is on the right.**

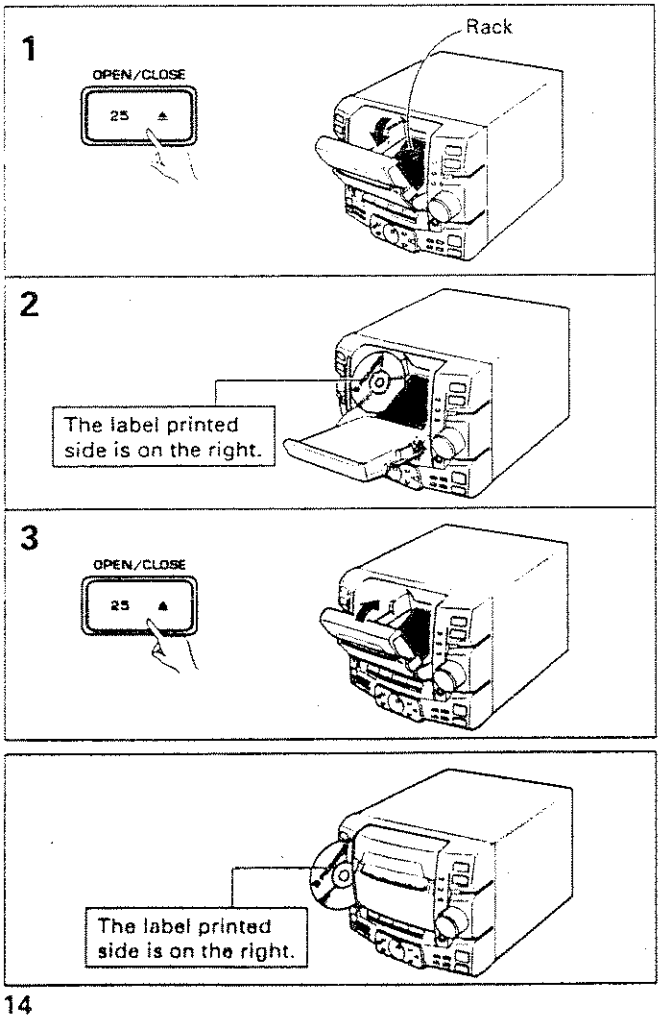


- Do not apply unreasonable force when opening the door panel.
- While the door panel is opening or closing, do not try and stop it with you hand as this may result in damage to the unit.
- After opening the door panel, do not place anything on it.
- You cannot operate the unit when the door panel is open. Close the door panel before operating.
- Do not place anything other than compact discs in the rack or Plus 1 Disc Slot.
- Do not use an 8 cm (3-inch) CD adaptor.
- Place only one CD in each rack slot.
- **Never insert more than one disc at a time into one rack slot. This can scratch or damage the discs.**
- When closing the door panel, be careful not to catch your fingers in it.
  Never put your hand or any object inside the unit.



- Never load more than one disc in the Plus 1 Disc Slot.
- If you place the disc in the Plus 1 Disc Slot with the label side on the left, the disc is automatically ejected.
- If you load both 12 cm (5-inch) and 8 cm (3-inch) discs in the rack, exchanging 8 cm (3-inch) discs become more difficult. You are recommended to load 12 cm (5-inch) discs from the left, and 8 cm (3-inch) discs from the right.
- **Use this unit on a flat surface.**

LISTENING TO COMPACT DISCS



Before operating the player

Loading discs in the rack inside the door panel

You can load up to 25 discs in the rack.

You can use the 5-DISC ACCESS buttons ([1 - 5] to [21 - 25]) as selection buttons for five blocks each with five discs. To cancel the selection, press the 5-DISC ACCESS button again.

Refer to Disc Title Memory, page 20, for details concerning memorizing 5-disc access.

1. **Press the 25 OPEN/CLOSE button (▲).**
   The door panel opens automatically.
2. **After confirming that the door panel is completely open, load discs with the label side on the right.**
3. **Press the 25 OPEN/CLOSE button (▲).**
   The door panel closes automatically.

To remove a disc, press the 25 OPEN/CLOSE button (▲).

You cannot open the door panel when a disc is playing. Confirm that play has stopped before opening the door panel.

If the unit is not operating, simply press the 25 OPEN/CLOSE button (▲).

Loading a disc in the Plus 1 Disc Slot

Use this slot when you want to listen to just one disc.

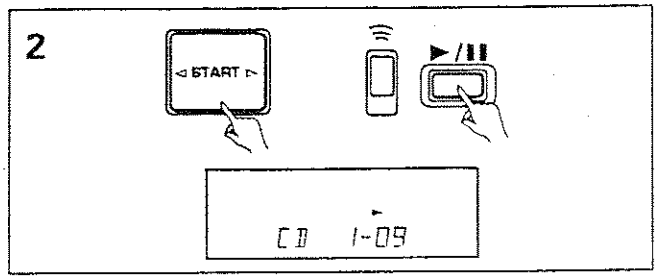
- Slowly load a disc in the Plus 1 Disc Slot, with the label side on the right.
  As soon as a disc is partially loaded, it is automatically pulled in and perfectly loaded, and play starts.

Removing a disc

To remove a disc in the Plus 1 Disc Slot, press the SLOT EJECT button (SLOT) to eject.

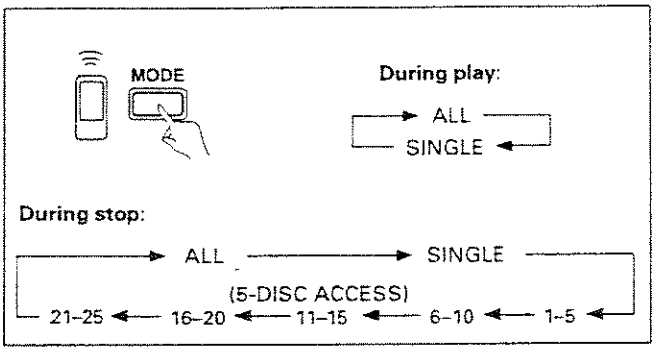
NOTE:

Never insert more than one disc at a time into one slot. This can scratch or damage the discs.



TO STOP PLAYBACK

Function	Buttons
To stop playback	STOP ■
To stop playback temporarily	START ▷ ►/II
To play back again	START ▷ ►/II



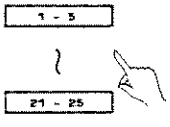
Listening to tracks in order from the first track

1. **Load a disc in the rack, and close the door panel.**
   For Plus 1 Disc Slot play, load a CD in the Plus 1 Disc Slot.
2. **Press the START button.**
   Plays starts from the first track of the lowest numbered loaded disc.

TO SEARCH FOR A PARTICULAR TRACK

Function	Buttons
To search for the beginning of a track	TUNING Press and release quickly
To rapidly advance forward or backward (Main unit only)	TUNING Keep pressed.

To listen to each of the five discs in a block (5 disc access)



Press a 5 disc access button.
Play of the CDs in the block selected with 5 disc access begins.
Press the 5 disc access button once more, and block selection is canceled.

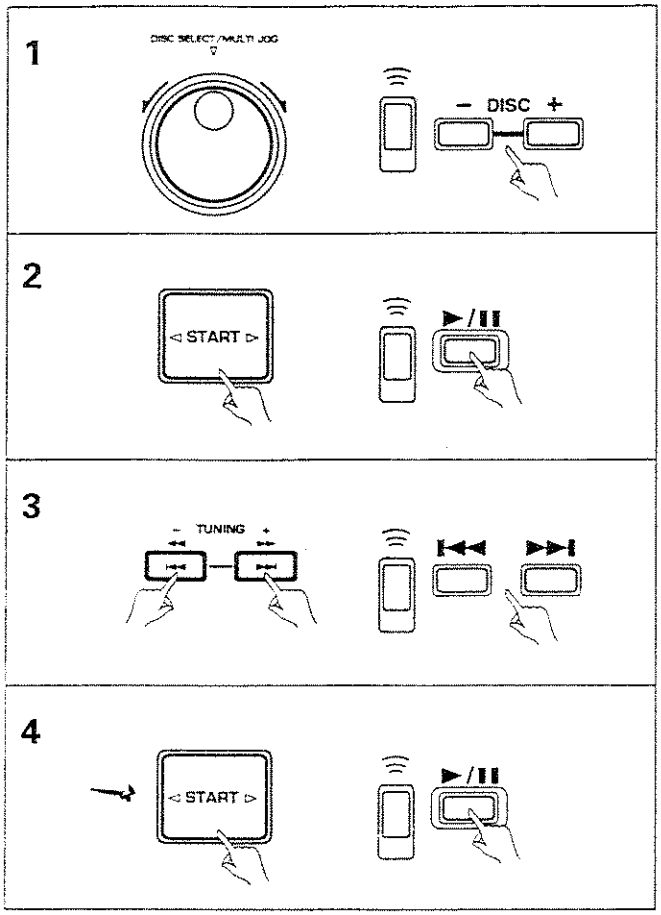
Select the disc play mode

To select the play mode, press the CD MODE button on the remote control unit while the unit is stopped or in the play mode.

ALL : Plays all discs loaded.
SINGLE : Plays only one disc.
5-DISC ACCESS (1–5 ~ 21–25) : Plays the selected discs in the 5-disc access.

Last Disc memory

- If you press the STOP (■) button (or the Stop (■) button on the remote control), or turn off the power, this unit memorizes the disc that was playing. When you press the Start button again, that disc starts playing from the beginning.
- If a disc is loaded into the Plus-1 slot while the unit is stopped, the last-disc memory will be canceled.
- During normal play, if the single mode is selected, the single disc play mode will be set for the currently playing disc.
- If the CD MODE button is pressed when the unit is in the program mode, the program contents will be canceled.
- Play starts from the lowest numbered disc selected in the 5-DISC ACCESS mode.
- When the power is first turned on, play will begin from the last mode selected previously.
- If no play mode has been selected, play begins by default in the all disc mode.
- This mode does not operate while a CD plays in the plus 1 disc slot. (Only the SINGLE mode)
- After Best Selection Memory play (Refer to page 19) has finished, or after a program has been canceled, you return to the ALL mode.



To play back desired tracks

- **Playing a desired disc (Disc Search)**
  Follow procedures 1 and 2 in order.

- **Playing desired tracks from a selected disc (Direct Track Selection)**
  Follow procedures 1, 3, and 4 in order.

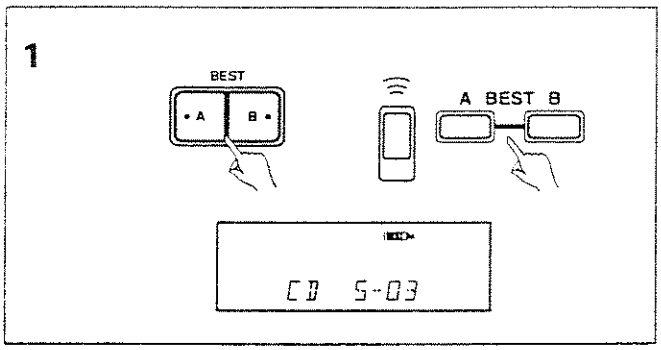
1. **When the unit is not operating or when a disc is playing, turn the DISC SELECT knob to select the desired disc number.**
   - Select P0 to play the Plus 1 disc.
   - If you do this while a disc is playing, the selected disc starts playing automatically.

2. **Press the START button.**
   The selected disc starts playing from the first track.

3. **Select the desired track using the ⊣⊢ or ⊣⊢ button.**
   If you do this while a disc is playing, the selected track starts playing automatically.

4. **Press the START button.**
   The selected track starts playing.

   - You can select tracks from discs selected in the 5-DISC ACCESS mode.
   - Direct track selection is not possible during programmed play.



Best selection memory

- You can memorize a desired track when it is playing by simply pressing the BEST button.
- Plus 1 disc cannot be memorized.
- You can memorize up to 25 tracks in each of BEST A or B.

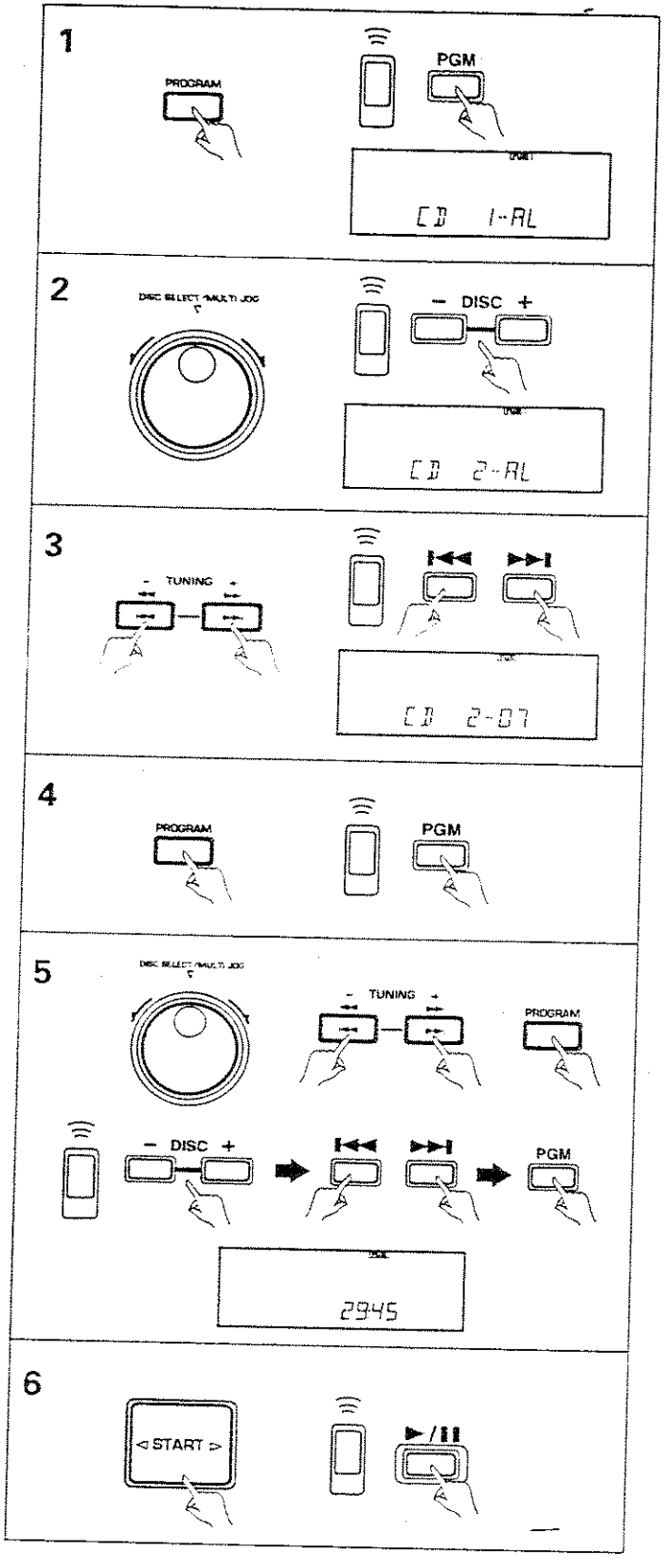
1. **Press the desired BEST button (A or B) when a desired track is playing.**
   The disc number and track number are memorized.

2. **Repeat the procedure 1 to complete the best selection memory.**

To listen to a memorized track:
Press the desired BEST button (A or B) when no disc is playing, and the last memorized track starts playing.

Clearing memory:
During Best Selection Memory play, press the CLEAR button on the remote control unit. The track playing is cleared from memory.

- Best Selection Memory operation is not possible during Best Selection Memory play. (Example: BEST A selection memory is not possible during BEST A selection play.)
- If you memorize a track after having already memorized 25 tracks on one side, the oldest memorized track is erased from memory.



Programmed play

- You can create a program with up to 32 steps.
- Programs can be created by remote control.

Example:
When programming the 7th track on the 2nd disc for the 1s step, and the 3rd track on the 5th disc for the 2nd step.

1. **Press the program (PGM) button when no disc is playing.**
2. **Select a disc number with the DISC SELECT knob.**
   Select P0 to play the Plus 1 disc.
3. **Select a track number using the ⏮ or ⏭ button.**
4. **Press the program (PGM) button.**
   Repeat procedures 3 and 4 to program other tracks on the same disc.
5. **Repeat procedures 2 to 4 until you have programmed all the desired tracks.**
   You cannot program the Plus 1 Disc together with discs loaded in the rack.
6. **Press the START button.**
   Play of programmed tracks starts in order.

Disc All Program
Repeat programmed play procedures 1, 2, and 4 in order.
This programs all tracks on selected discs.

Canceling programmed play
During play, press the STOP button twice.
When no disc is playing, press the STOP button once.
(When no disc is playing, if you press the BEST button, PREVIOUS button, CD MODE or RANDOM button, programmed play is canceled.)

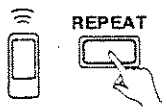
Clearing program steps
Press the remote control unit's CLEAR button on the remote control unit during programming.
Each time you press the button, the last programmed step is cleared.

NOTE:
During programming or programmed play, if you play a plus 1 disc, all programmed tracks are cleared, and the plus 1 disc plays.

When programming, each disc's TOC information is read, and the total play time of programmed tracks is calculated.
If you want to know how long the programmed play time is, wait for a while after procedure 5 and it is indicated in the display. (Max. 99 min. 59 sec.)
If you perform procedure 6, open the door panel or turn the power off before calculation has finished, calculation is not performed.

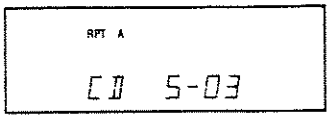
To repeat playback (Repeat play)

- This repeats play of the discs set for a selected play mode.
- Select Repeat Play by remote control.

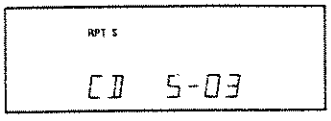


Press the REPEAT button while a disc is playing.
Play of discs set for the selected play mode is repeated.

ALL Disc Repeat : Press the REPEAT button during All mode play.
Play of all tracks on all discs (1 to 25) is repeated.

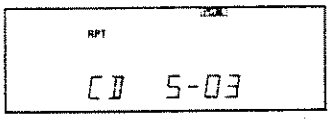


SINGLE Repeat : Press the REPEAT button during Single mode play.
Play of all tracks on one selected disc is repeated.

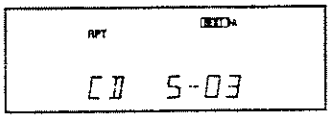


5-DISC ACCESS Repeat : Press the REPEAT button during 5-DISC ACCESS mode play.
Play of All tracks on selected discs is repeated.

PROGRAM Repeat : Press the REPEAT button during programmed play.
Play of all programmed tracks is repeated.



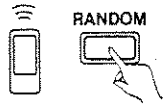
Best Selection Repeat : Press the REPEAT button during Best Selection Memory play.
Play of all songs memorized in Best Memory is repeated.



To cancel repeat play:
Press the REPEAT button.
- When repeating only one track, program the desired track, and press the REPEAT button.

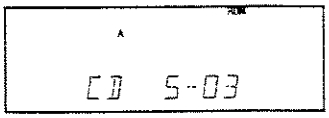
Random play

- Depending on the playback mode, the tracks on the loaded disc will be played back in random order (once each). When all tracks on the disc have been played back, the player will stop.
- Select Random Play by remote control.
- Random play of up to 25 tracks is possible.

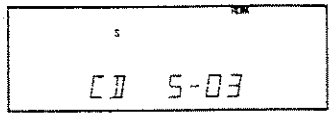


: Press the RANDOM button during play or when no disc is playing.
Random play of tracks set for each play mode begins.

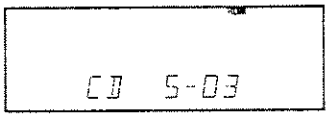
ALL Random : Press the RANDOM button during All mode play.
A total of 25 tracks from all the discs are played at random.



SINGLE Random : Press the RANDOM button during Single mode play.
Tracks from a single disc are played at random.



5-DISC ACCESS Random : Press the RANDOM button during 5-DISC ACCESS mode play.
Up to 25 tracks from selected discs are played at random.



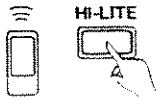
If you press the REPEAT button during Random play, tracks are played at random.

To cancel random play:
Press the STOP (■) button.
Random play is canceled, and play stops.
- When you press the DISC (–, +) buttons, random play is canceled, and normal play resumes.

NOTES:
- *A programmed selection of tracks (program play) cannot be played in random order. (If the RANDOM button is pressed during program play, the program will be canceled and the ALL mode random play will start.)*
- *If less than twenty-five discs are loaded in the ALL mode, or in the 5-DISC ACCESS mode, the same track may be played more than once.*

Fast track search (Hi-Lite Scan)

- A passage about 10 seconds long starting from one minute into each track on discs set for a selected play mode is played.
- Select Hi-Lite Scan by remote control.



Press the HI-LITE button, and a passage about 10 seconds, starting from one minute into each track on each of the discs set for a selected play mode is played.

Disc Hi-Lite Scan : Press the HI-LITE button when no disc is playing.
A passage about 10 seconds, starting from one minute into the first track on each disc is played, starting from the first disc.
Disc Hi-Lite Scan stops when all the discs have been scanned.

Track Hi-Lite Scan : When no disc is playing, if you press the HI-LITE button twice, a section from each track on each loaded disc is played for about 10 seconds, starting from one minute into each track. Track Hi-Lite scan stops when all the tracks have been scanned.

Program Hi-Lite Scan : Press the HI-LITE button during program mode.
A passage about 10 seconds, starting from one minute into each of the programmed tracks is played.

Best Selection Memory Scan
: Press the HI-LITE button during Best Selection Memory play.
A passage about 10 seconds long starting from one minute into each of the Best Selection tracks is scanned.

- If you press the START button when scanning a track you want to listen to, Hi-Lite scan is canceled and regular play of that track resumes.

To cancel scanning :
Press the Stop button.

- Each time you press the HI-LITE button, scanning switches between disc scan and track scan.
- During track scan, you can skip tracks using the ⏮, ⏭ buttons.

NOTE
With tracks that are shorter than one minute, a passage about 10 seconds starting from the beginning of the track is played. If a track is shorter than ten seconds, the entire track is scanned from start to finish.

Previous disc scan

- Disc HI-LITE scan is performed in the most recently listened to order.
- 25 discs are memorized.
(Discs played in the Plus 1 Disc Play mode are not memorized.)
- With more than 25 discs, the old order is erased.

Example:
When the disc play order was 1st disc, 2nd disc, 9th disc, 12th disc, and 13th disc.

Press the PREVIOUS button during play.

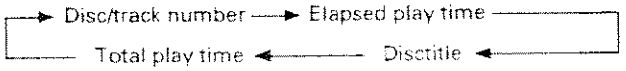
A passage about 10 seconds, starting from one minute into the first track on each disc is played, starting from the 13th disc followed by the 12th, 9th, 2nd, and 1st discs in order (the order in which they were most recently listened to).

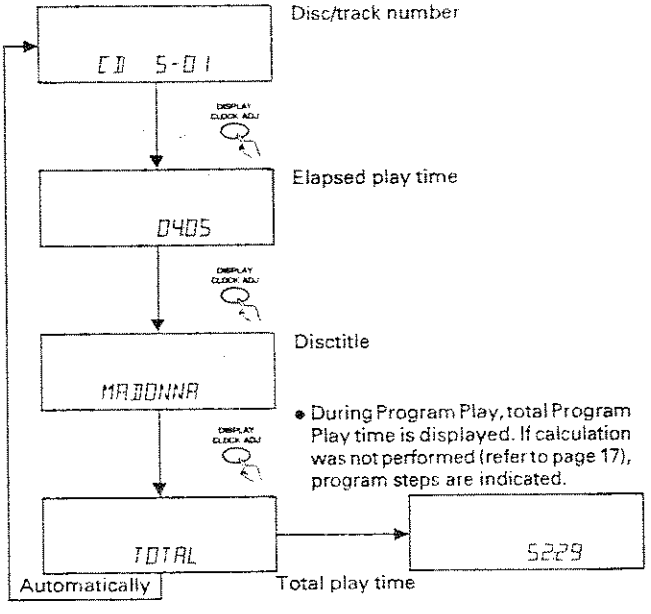
- Press the START button when you hear a disc you want to listen to. Previous Disc Scan is canceled, and normal play resumes.

To cancel Previous Disc Scan:
Press the STOP button.
- Discs played in Random, Highlight Scan, Program, and Best Memory modes are not scanned during Previous Disc Scan.

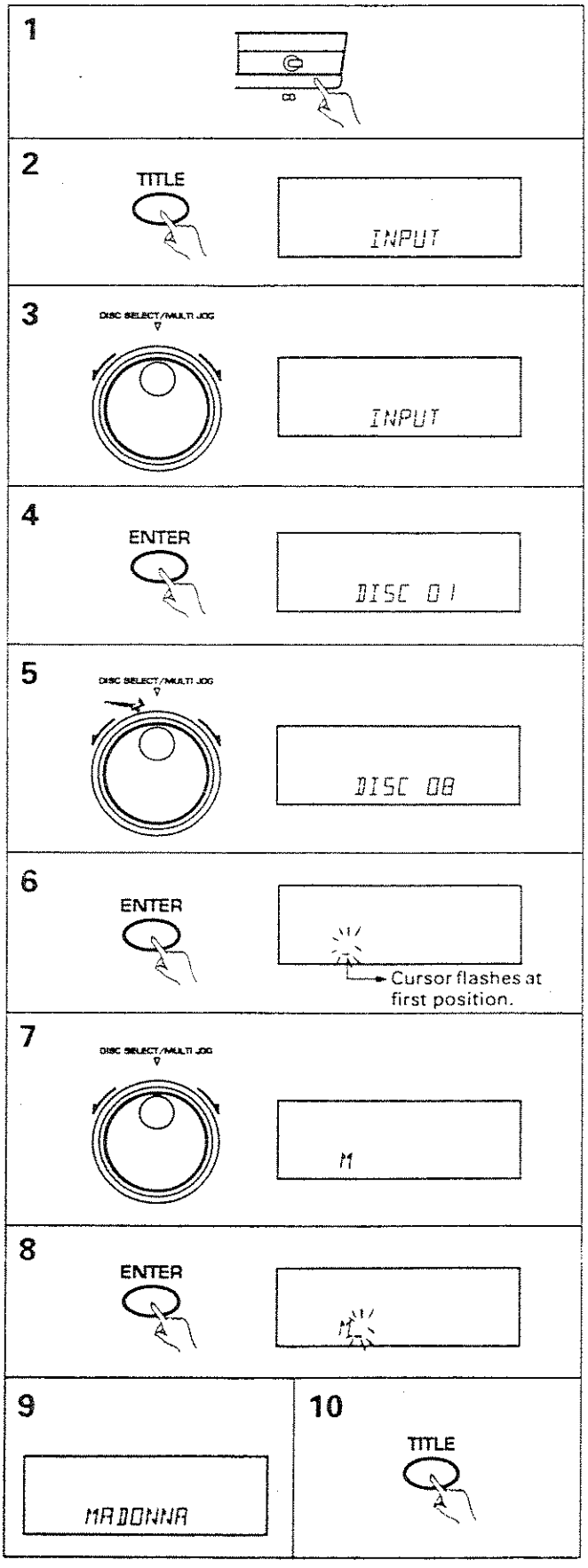
Changing the display

The display changes each time you press the button.





- During Program Play, total Program Play time is displayed. If calculation was not performed (refer to page 17), program steps are indicated.



Disc title memory

- **Lets you enter, copy, or erase disc titles.**
- In the display section, you can register disc titles by genre, artist name, or other name as desired using up to eight characters. (You cannot title a Plus 1 Disc.)
- Refer to page 19 concerning how to change the display input.
- Characters that can be input
  Letters : A to Z
  Numbers : 0 to 9
  Symbols : –, +, /, <, >, ♥, ♫, □ (space)

Example : When inputting MADONNA as the title for the 8th disc.

1. **Press the CD function button.**
2. **Press the TITLE button.**
3. **Turn the MULTI JOG knob to select INPUT.**
   INPUT : title input
   COPY : title copy
4. **Press the ENTER button.**
5. **Turn the DISC SELECT knob to select the disc or 5-DISC ACCESS mode you want to title.**
6. **Press the ENTER button.**
7. **Turn the MULTI JOG knob to select the letter, number, or symbol you want to input.**
8. **Press the ENTER button to move the cursor to the right.**
   When you make a mistake inputting during steps 6 to 8:
   - The cursor moves each time you press the ◁ ▷ button.
   - Press the STOP button, and all the letters inputed are erased. The cursor returns to the position of the first letter.
9. **Repeat procedures 7 and 8.**
10. **Press the TITLE button to complete title input.**
    The entered title will be flashed for about 3 seconds.

Title copying and clearing

- Copy
  You can copy a previously input title to another disc number.

1. **Performing steps 2 to 7.**
   In step 3, select COPY.
   In step 5, select and display the disc title you want to copy.
   In step 7, select the disc you're copying the title to.
2. **Press the title or ENTER button.**

- Clearing
  You can clear a previously input title.

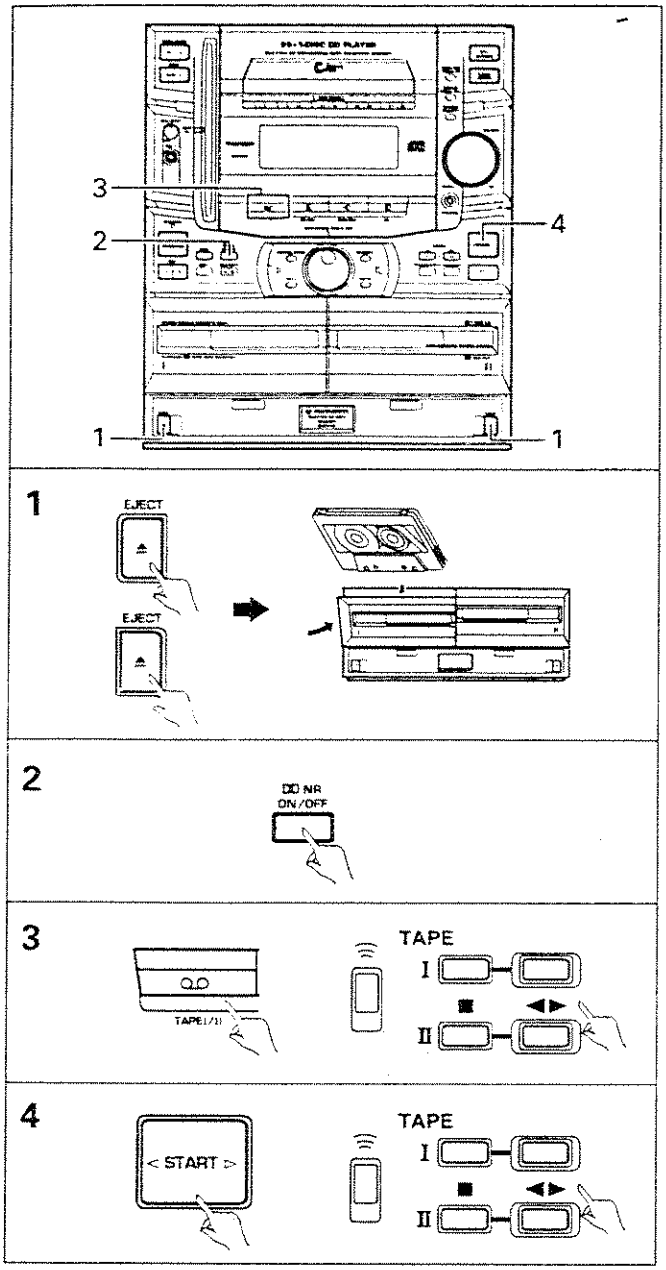
1. **Perform procedures 2 to 6.**
   Select the INPUT mode in procedure 3.
2. **At procedure 6, the title is input. Press the STOP button (Pressing it again takes you back a step.)**
3. **Press the TITLE button.**

- A maximum of 30 titles can be registered. (25 discs plus 5-DISC ACCESS)
- Plus 1 Disc titles cannot be input.

Incomplete title

- If all eight characters are spaces, it is not considered a title, and is not recorded. (Indicates "NO TITLE".)

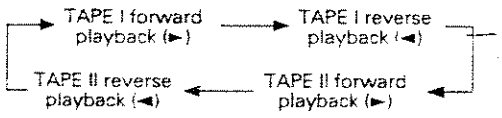
PLAYING TAPES



Basic operation

- Tapes used for playback may be either Type I (normal), Type II (High/CrO2), or Type IV (Metal).
- Tapes may be played back in TAPE I or TAPE II but not in both decks at the same time.

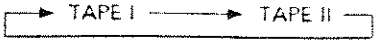
1. **Press the Eject button (▲) and load a recorded tape, then push in the cassette door until it locks.**
   For relay playback, load tapes into TAPE I and TAPE II. Relay playback is repeated as follows (32 sides maximum):



   If there is a tape in only one deck, that deck continuously plays both sides of the tape (16 sides maximum).

2. **Set DOLBY NR to the same position used for recording.**
   Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on.

3. **If tapes are loaded in both deck I and II, press the TAPE I/II (Function) button to select the tape to be played back first.**
   When a tape is loaded, the loaded deck will automatically be selected.
   Each press of the button alternates TAPE I and TAPE II as shown below:



   Selected one starts playback.

4. **Press the START button to switch the direction you want to start playback.**
   (Indicator shows you tape transport direction.)
   ► : Forward playback
   ◄ : Reverse playback

When you use the remote control unit, press the Play button (◄►) for the deck you choose to play (TAPE I or II).

To stop playback:
Press the STOP (■) button.

To fast forward or rewind, press ⏭ (or ⏮) or ⏭ (or ⏮) button while the tape is stopped.

Music search

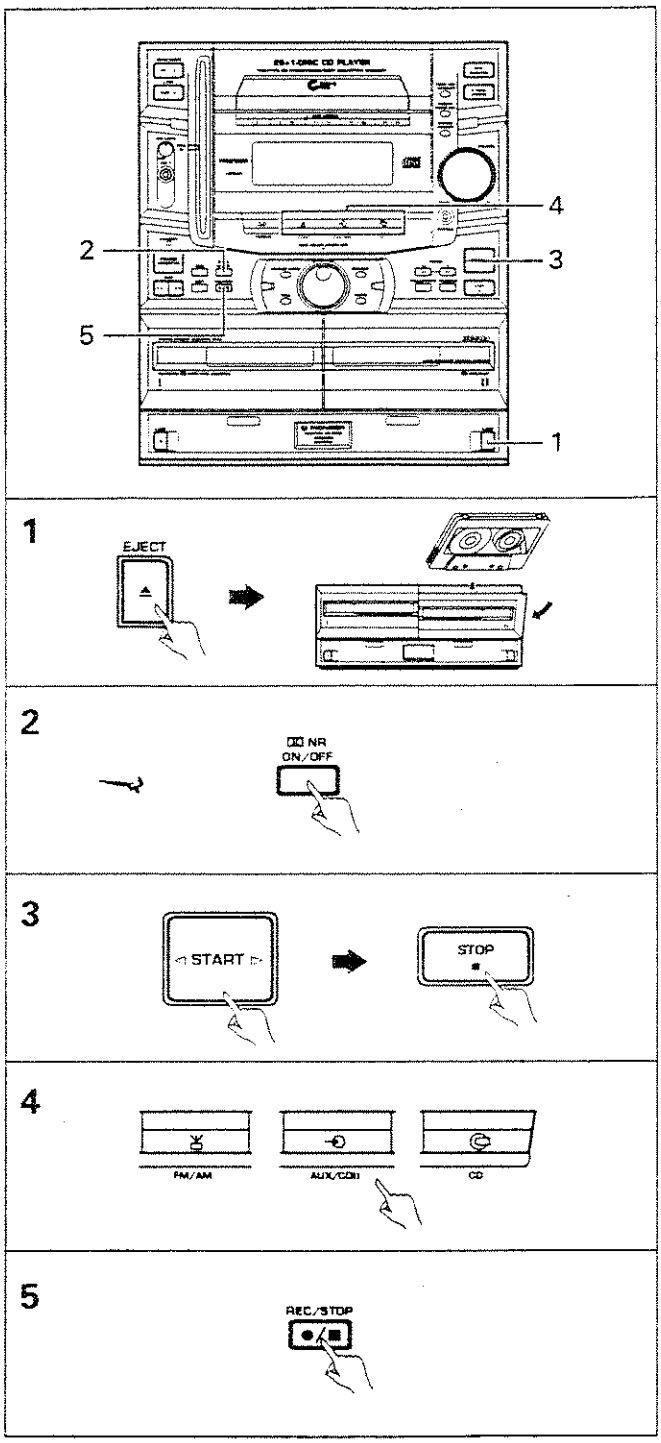
During forward playback (►)
Press the ⏭ button once to return to the beginning of the current track.
Press the ⏭ button once to go to the beginning of the next track.

During reverse playback (◄)
Press the ⏮ button once to return to the beginning of the current track.
Press the ⏮ button once to go to the beginning of the next track.

NOTES:
Performing music search on the following types of tape may not be possible. This is not a unit malfunction, however.
- *A tape whose unrecorded portions between tracks are less than 4 seconds long.*
- *A tape with high noise level between tracks.*
- *A tape with low level or silent passages of several seconds in the same track, such as classical music.*
- *When the tape's sound is broken irregularly, as in recordings of speeches or dialogue.*
- *When a track is less than 30 seconds in length.*
- *When a tape has sound which continues at very low volume for more than 4 seconds.*

NOTES:
- *Do not press the Eject (▲) button while the tape is running.*
- *Confirm that the deck has stopped before pressing the Eject (▲) button.*

Auto Stop Mechanism
This mechanism automatically stops the tape when the end of the tape is reached during fast forward or reverse (⏭ or ⏮).



Recording on tape

- Tapes used for recording may be either Type I (normal) or Type II (High/CrO_2).

1. **Load a tape for recording into deck II.**
   - Wind the tape past its leader portion so that the magnetic surface is exposed.
   - Recording cannot be performed on a tape if the accidental erasure prevention tab has been broken out.
   - Insert the tape for recording and close the cassette door with your hand.
2. **Use the DOLBY NR ON/OFF button to select the desired noise reduction mode.**
   - Each time the button is pressed, the mode changes in the following order:

     ► on ——► off ┐
3. **Press the START button, switch to the tape direction you want to record in, and press the STOP button.**
   - ► : Recording on side A followed by recording on side B. When recording on side A (►), has finished, recording on side B (◄) automatically starts.
   - ◄ : Recording on one side. Recording is performed in the reverse (◄) direction, so be sure to load the tape accordingly.
4. **Use the Function button to select the input source.**
   - For tape copying (recording from deck I to deck II), use the tape copy function.
5. **Press the REC/STOP button (●/■).**
   Recording starts, and the "REC" indicator lights.
   - Microphone-mixing sounds can also be recorded if desired (see page 27).

To cancel, press the REC/STOP button (●/■) or the Stop button on the remote control.

NOTES:

- *You cannot switch inputs during recording.*
- *This unit uses ALC (Auto Level Control) to automatically set recording level.*
- *During recording, Sound Field Control and P.Bass do not function. Also, Dolby surround sound will not function on XR-P970F either. The karaoke ON/OFF button does not operate during recording either.*

Copying a tape

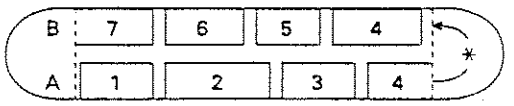
The contents of the tape in TAPE I can be copied onto the tape in TAPE II.
Tape copying should begin in the forward direction (►).

1. **Press the TAPE (I/II) function button of the main unit to select the cassette tape input function.**
   On the remote control unit, select the cassette deck input with the Function button.
2. **Load the recorded tape into TAPE I and the tape for recording into TAPE II.**
   - Wind the tape forward past the leader to the start of the magnetic coated portion.
   - The tape copy mode is canceled when the end of either of the tapes is reached, so it is advisable to use tapes of the same length.
3. **Press the COPY button.**
   "COPY" is displayed.
4. **Press the START button.**
   The tape copy starts.

To stop copying:

Press the Stop button ■. (On the remote control unit, press the TAPE I or TAPE II stop (■) button.) Both decks will stop simultaneously.

- Regardless of the Dolby NR setup, the tape created by copying has exactly the same contents as the copy source tape.



A, B : Indicates the side of the tape.
1–7 : Indicates the number of the track.
* : Indicates the leader part of the tape.

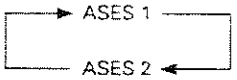
A.S.E.S. (Auto Synchro Editing System)

■ **What is A.S.E.S.?**

- A.S.E.S. is a special function which automatically programs the recording of CD tracks, so that the track which is only partially recorded at the end of cassette side A is recorded again in full at the beginning of cassette side B.
- When the A.S.E.S. function is used, if the playback mode has been selected on the CD player, recording will be performed in the sequence of the playback mode.

ALL : All discs recorded A.S.E.S.
SINGLE : Only the displayed disc is recorded A.S.E.S.
5-DISC ACCESS
: The selected 5-DISC ACCESS group (1-5 to 21-25) is recorded A.S.E.S.
PROGRAM : The selected tracks only are recorded A.S.E.S.

1. **Load discs in the CD player. (Refer to page 14.)**
   - Use the program function to record tracks in a specific order. A.S.E.S. will not function in the DISC ALL PROGRAM.
   - When recording beginning with a specific disc, use the DISC SELECT knob to select the disc number.
   - **Never insert more than one disc at a time into one rack slot. This can scratch or damage the discs.**
2. **Press the CD function button.**
   Play starts automatically, so be sure to press the STOP button.
3. **Load a tape for recording into TAPE II.**
   - Recording is in the forward direction.
   - Wind the tape past its leader portion so that the magnetic surface is exposed. (Refer to page 13.)
4. **Set the DOLBY NR ON/OFF button to the desired noise reduction mode.**
5. **Press the ASES button.**
   "ASES 1" is displayed.
6. **Select "ASES 1" or "ASES 2" with the MULTI JOG knob.**
   Turning the knob switches between ASES 1 and ASES 2.



ASES 1:
① Perform procedure 7 →A.S.E.S. operation starts
② Press BEST button A. →Starts A.S.E.S. with best selection A.
③ Press BEST button B. →Starts A.S.E.S. with best selection B.

ASES 2:
Enables A.S.E.S. with the first track only of each disc.

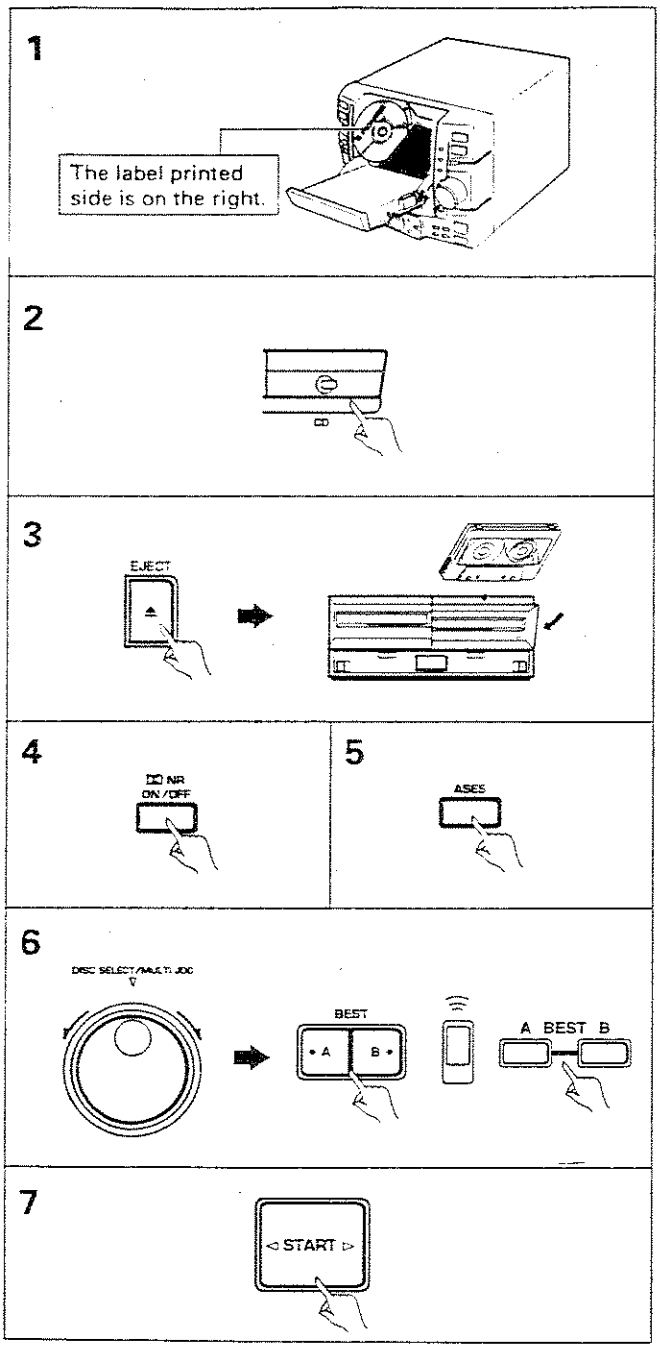
7. **Press the START button (◄◄ ►►).**
   A.S.E.S. starts.

To cancel the A.S.E.S.:

Press the STOP button (■).

NOTES:

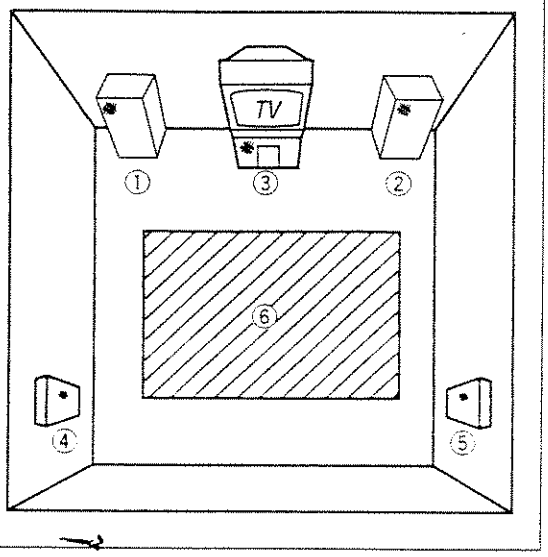
- *By setting the CD player for all-track repeat in one of the disc modes, you can record a tape fully without leaving any remainder (repeat A.S.E.S.).*
- *During use of the A.S.E.S. function, near the end of a tape the CD player may skip to the next track, or the CD may be interrupted after ending its play. In this case, record the remaining tracks manually, without use of the A.S.E.S. function.*



SURROUD MODE

L : Front speaker (Left)
R : Front speaker (Right)
S : Surround speakers (Sold separately on the XR-P770F only.)
C : Center speaker (XR-P970F only)
○ : Must be connected
◎ : More effective when connected
X : No need to be connected

An example of speaker positioning



To get the most out of the surround system, place the speakers as shown in the figure.

① **Front left speaker**
② **Front right speaker**
③ **Center speaker (XR-P970F only)**
④ **Surround (rear) left speaker**
⑤ **Surround (rear) right speaker**
⑥ **Listening area**

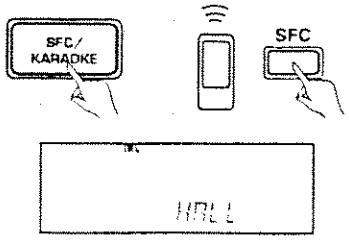
If the rear speakers are positioned too far from the system, the rear level becomes unable to adjust and the surround effect will not be fully achieved.

NOTES:

- *To avoid interference with the picture on a nearby TV set, use magnetically shielded speaker systems. This is particularly important for the center speaker since it is usually located closest to the TV.*
- *Position the left and right channel speakers at equal distances from the TV set and approximately 1.5 m from each other.*
- *Place the center speaker halfway between the left and rignt front speakers. (Do not place the speaker on the TV.)*
- *The rear (surround) speakers are most effective when installed in parallel locations directly to the side, or slightly behind, the listener, at a level about 1 meter above the listener's ears.*

Mode			Sound field effect	Speakers			
				L	R	S	C
	SFC	HALL	Produces the effect of an expansive concert hall with rich spatial breadth.	○	○	◎	X
		MOVIE	Produces the effect of three-dimensional movie theater space, effective for use when watching video movies.	○	○	◎	X
		LIVE	Produces the effect of an exciting live concert atmosphere.	○	○	◎	X
		DISCO	Produces the effect of a discotheque with powerful bass rhythm.	○	○	◎	X
XR-P970F only	DOLBY PRO LOGIC	NORMAL	Reproduces music or movie software bearing the DOLBY SURROUND mark.	○	○	○	○
		PHANTOM	Reproduces the software mentioned above without using a center speaker.	○	○	○	X
	DOLBY 3CH LOGIC		Reproduces the software mentioned above without using surround (rear) speakers.	○	○	X	○

SOUND FIELD CONTROL (SFC) OPERATION



Example: HALL is selected.

Selecting a preset sound setting

What is "sound field control (SFC)"?
This function allows you to select four different sound fields, each of which produces an effect similar to that heard in the respective location settings.

1. **Use the SFC/KARAOKE button to select the desired sound field.**
   Each time the button is pressed, the sound field changes in the following sequence:

HALL → MOVIE → LIVE
off ← KARAOKE ← DISCO

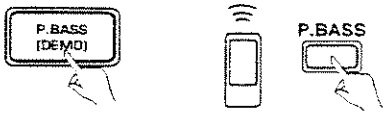
With the remote control unit, each time the SFC button is pressed, the sound field changes in the following sequence:

HALL → MOVIE → LIVE
off ← DISCO

To listen without any sound field control, set to OFF.
The sound field control is canceled.

NOTE:
When you select SFC, the P.BASS and Dolby Surround Sound are switched OFF.

Boosting the bass sound



Each time the P.BASS button is pressed, the display changes in the following sequence:

P.BASS 1 → P.BASS 2
OFF

P.BASS1 : Enhanced bass
P.BASS2 : Enhanced bass and mid-range.

NOTE:
When you select P.BASS, the SFC and Dolby Surround Sound are switched OFF.

USING DOLBY SURROUND SOUND (XR-P970F ONLY)

DOLBY PRO LOGIC SURROUND

Choose this setting for movie and music (especially Video Discs and video tapes bearing the DOLBY SURROUND mark) playback.
DOLBY PRO LOGIC SURROUND continuously detects the size and direction of the dominant signal and cancels undesirable crosstalk, thereby providing signal emphasis.
It allows you to clearly perceive the source and direction of the music. Real flow of sound also can be re-created naturally using this feature. You feel as if you are in an outstanding and expansive sound field.

DOLBY 3CH LOGIC

Combining the rear speaker signal with that of the front speakers results in a regenerated sound field which has comparatively more presence and a more expansive feeling from the front 3 channels (front L, front R, and center speakers) than that of ordinary stereo regeneration.
DOLBY 3CH LOGIC can be used with stereo sources not encoded with DOLBY SURROUND.

DOLBY PRO LOGIC SURROUND CENTER MODE

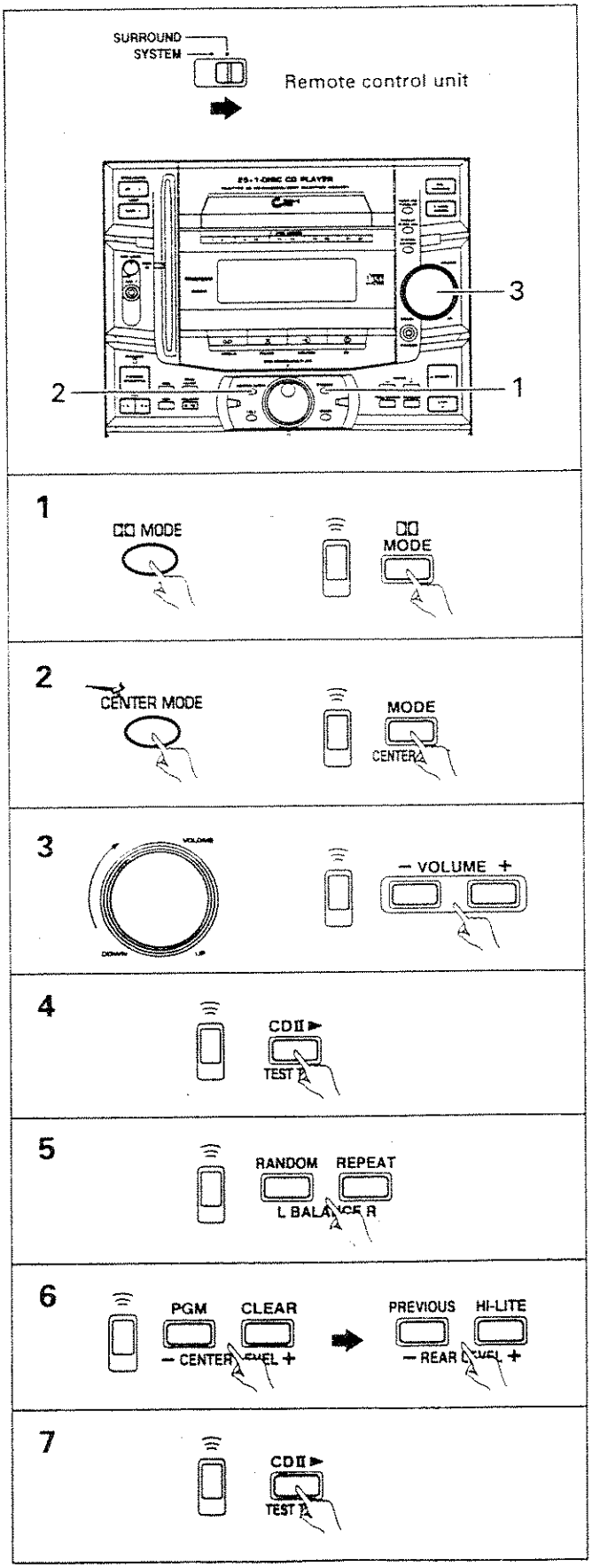
<DOLBY PRO LOGIC SURROUND>
You can choose from the following settings:

Center Mode choices:
When using a center speaker:
- **NORMAL** – Low range frequencies, which have little effect on directionality and positioning, are routed to the left and right front speakers. This allows you to use a relatively small size speaker as the center speaker.

When not using a center speaker:
- **PHANTOM** – The signal which would have been sent to the center speaker is divided equally between the left and right front speakers.

With DOLBY PRO LOGIC SURROUND, monaural source sound will be heard only from the center channel at settings other than the PHANTOM position.

<DOLBY 3CH LOGIC>
The center mode is fixed at the normal setting.



CREATING THE DOLBY SURROUND SOUND FIELD

- When performing this operation with the remote control unit, set the SYSTEM/SURROUND selector to the SURROUND side.

1. **Press the DD (Dolby) MODE button and select Dolby PRO LOGIC or 3ch LOGIC.**
   Each time this button is pressed, one of the settings will be selected in the following order.

   PRO LOGIC → 3ch LOGIC → OFF → PRO LOGIC

- When you select Dolby Surround Sound, the SFC and P.BASS are switched OFF.

2. **When Dolby PRO LOGIC is set, use the CENTER MODE button to select the center mode.**
   - During use of 3ch LOGIC, the CENTER MODE button does not operate.

   Each time the CENTER MODE button is pressed, one of the settings will be selected in the following order.

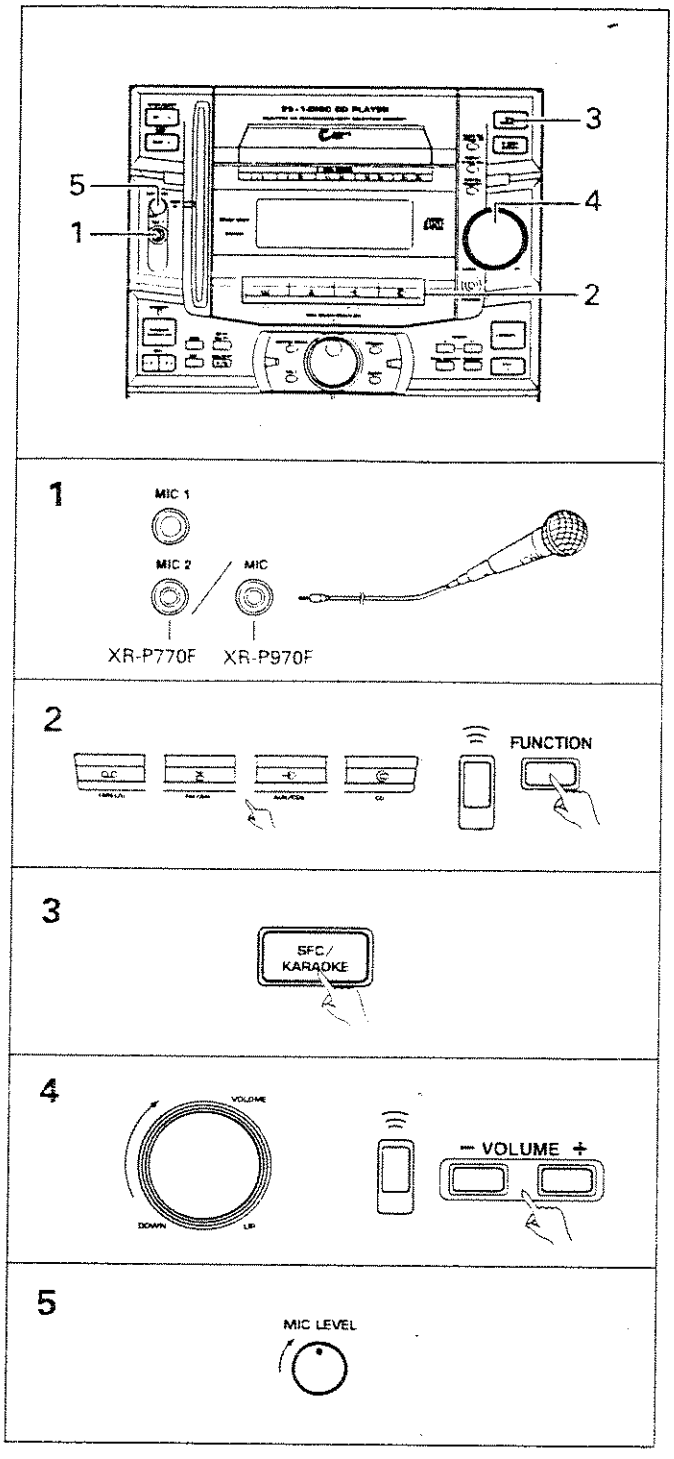
   NORMAL → PHANTOM → NORMAL

3. **Use the VOLUME control to adjust to the desired sound level.**
4. **Press the TEST TONE button.**
5. **Listening to the test tone, adjust the left and right front speakers' volume to the same level with the BALANCE (L, R) buttons on the remote control unit.**
6. **Listening to the test tone, press the CENTER LEVEL (+, –) and REAR LEVEL (+, –) buttons to adjust each speakers' output to the same level.**
7. **Press the TEST TONE button.**

NOTE REGARDING THE TEST TONE:

- *During use of Dolby 3ch LOGIC, no sound is produced by the rear speakers.*
- *When the center mode is set to PHANTOM, no sound is produced from the center speakers.*

FUN WITH KARAOKE FUNCTIONS



One-touch Karaoke Function

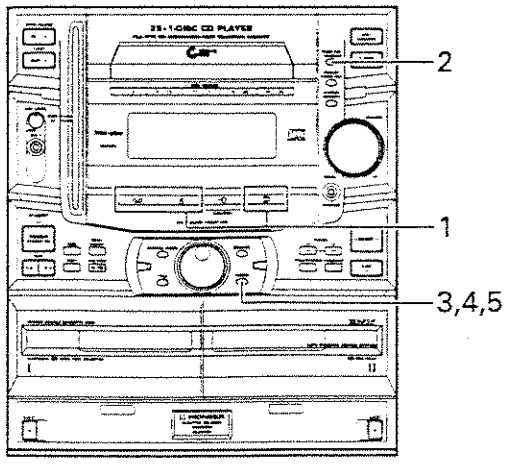
- The one-touch karaoke function is an electronic means allowing the reduction of vocal frequency bands of music sources (CD, tape, FM/AM broadcasts), in this way, creating a simple form of background accompaniment for karaoke sing-alongs when used in combination with a microphone.
  (Note that this function reduces but does not entirely eliminate the vocal bands of music sources. Also, the function does not operate with monaural sources.)

1. **Attach a microphone to the Microphone jacks (MIC or MIC 1, 2).**
   The Microphone jacks accepts microphones equipped with a mini-plug (diameter 3.5 mm).
2. **Select the desired music source.**
3. **Switch to "KARAOKE" using the SFC/KARAOKE button.**
   To cancel karaoke, switch to OFF with the SFC/KARAOKE button.
4. **Adjust the volume as desired.**
5. **Use the MIC LEVEL control to adjust the microphone sound volume.**

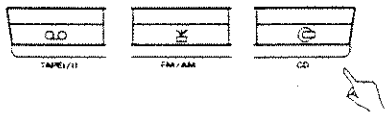
NOTES:

- *After completing use of a microphone:*
  Return the microphone level control to the MIN position, then disconnect the microphone plug from its jack. Keep the microphone level control set at MIN when not using a microphone.
- *By performing recording onto deck II while using the one-touch karaoke function, you can record the combined (mike-mixing) musical results of source and your singing. Note that microphone mixing cannot be performed, however, when TAPE is selected as the music source.*
  Also, during recording, the sound field control, P. BASS and Dolby Surround Sound functions do not operate.
- *The karaoke function may not operate with optimum effect for some music sources, for example, with music sources featuring duets or where the vocals are otherwise divided between right and left channels or with music sources produced with heavy echo effect.*
- *If microphone feedback ("howling") occurs, perform the following:*
  1. *Lower the microphone sound level (rotate the MIC LEVEL control to the left).*
  2. *Remove the microphone as far as possible from the speakers.*
  3. *Lower the overall volume.*

WAKE-UP TIMER



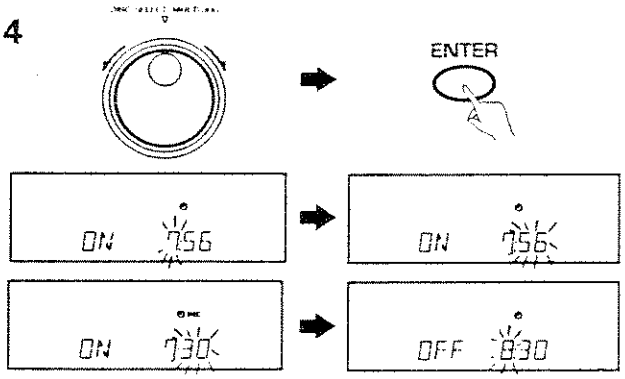
1



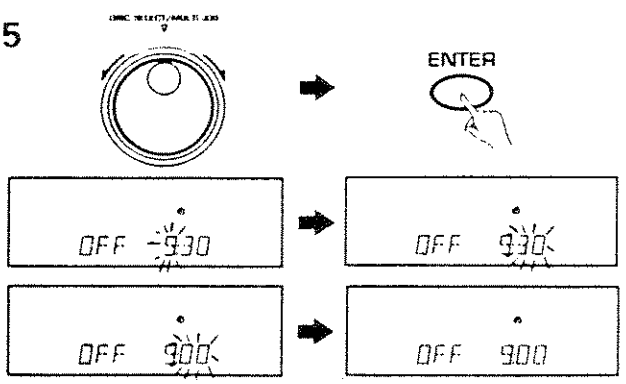
2 TIMER REC /WAKE-UP

3 ENTER

4



5



Setting the wake-up timer

Example : When setting from 7:30 AM to 9:00 AM. (The function is set to FM 87.50 MHz.)

Before beginning

① Prepare the function you want to play.
- CD : Load a disc in the CD player.
- Tuner : Tune into the radio station you want to listen to. That station is registered when the timer is set.
- Tape : Load a tape in the cassette player. (Playback starts on Tape I in the forward (►) direction)

② Set volume to the desired level with the volume knob.

1. **Switch power ON, and select the desired function.**
2. **Press the TIMER REC/WAKE-UP button. "WAKE UP" is displayed.**
3. **Press the ENTER button.**
4. **Set the timer start time. First, set the hour using the MULTI JOG knob, and then press the ENTER button. Set the minutes in the same way as you set the hour.**
5. **Set the timer finish time. A finish time one hour later than the start time is automatically displayed. First, set the hour using the MULTI JOG knob, and then press the ENTER button. Set the minutes in the same way as you set the hour.**
6. **The unit switches to the Check mode, and start/finish times, the function and the volume level are displayed.**
7. **Switch power OFF. The unit is now in the STANDBY mode.**
8. **Press the TIMER REC/WAKE-UP button until the timer indicator (⏲) lights. The mode then changes to the Check mode.**

Canceling the wake-up timer

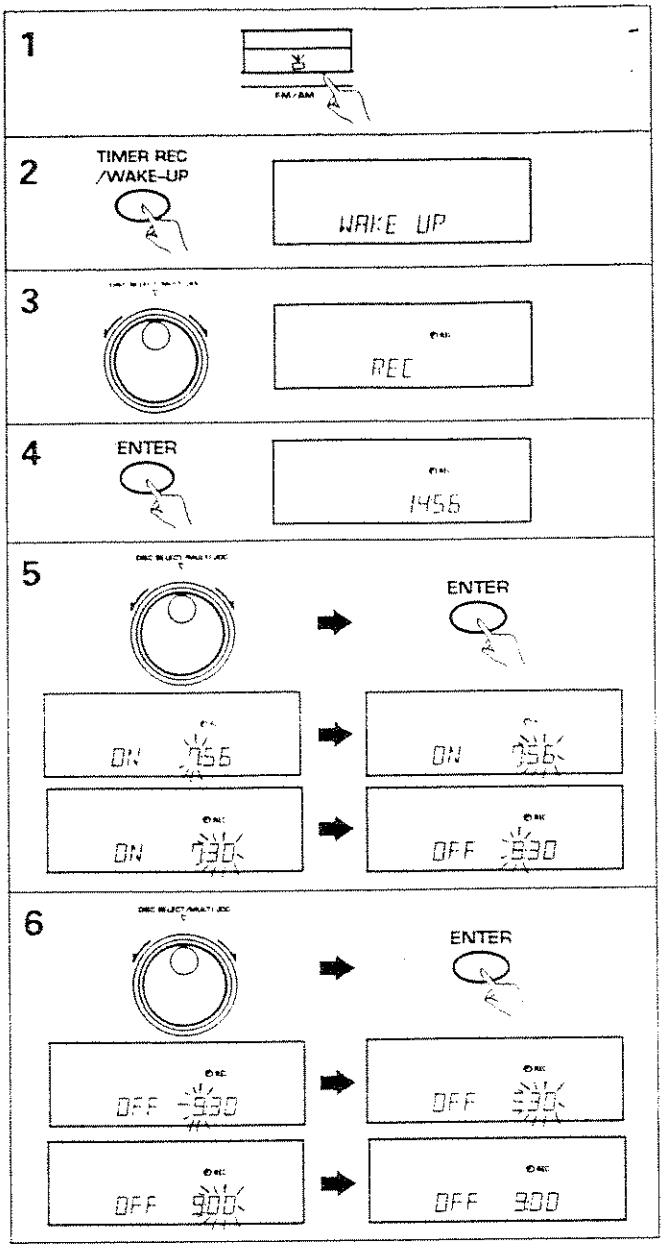
After setting or during setting, press the TIMER REC/WAKE-UP button until the timer indicator (⏲) goes out.

- Either Wake-up timer or Timer recording setting is possible, but not both.
- If you do not cancel the wake-up timer, it will operate at the same time every day.
- Slowly fades in music until the set volume level is reached.
- When you want to change timer settings or when you make a mistake during setting, repeat setting procedures from the beginning.
- If you press the TIMER REC/WAKE-UP button during timer operation, timer operation is canceled.
- Because this unit has a last disc memory (p.18), the wake-up timer plays the last disc you were listening to before power was switched OFF.

NOTE:

During Standby, press the DISPLAY CLOCK ADJ button to confirm timer settings. Remember that pressing the TIMER REC/ WAKE-UP button changes settings.

TIMER RECORDING



Timer recording setting

- Records an FM or AM broadcast at the set time.

Example : When setting from 7:30 AM to 9:00 AM.

Before beginning

(1) **Load Tape II with a cassette tape for recording. (Recording begins in the forward direction.)**
Set the tuner to the station you want to record.
The station you set here is memorized.

(2) **Volume level is at the minimum setting when timer operation begins.**

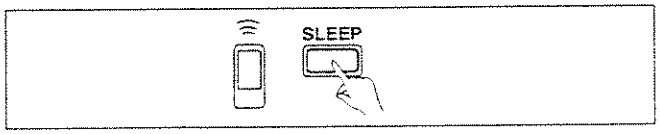
1. **Switch power ON, and select the tuner (FM/AM) function.**
2. **Press the TIMER REC/WAKE-UP button.**
   "WAKE UP" is displayed.
3. **Turn the MULTI JOG knob to select REC.**
4. **Press the ENTER button.**
5. **Set the timer start time. First, set the hour using the MULTI JOG knob, and then press the ENTER button. Set the minutes in the same way as you set the hour.**
6. **Set the timer finish time. A finish time one hour later than the start time is automatically displayed. First, set the hour using the MULTI JOG knob, and then press the ENTER button. Set the minutes in the same way as you set the hour.**
7. **The unit switches to the Check mode, and start/finish times and the recorded broadcast station are displayed.**
8. **Switch power OFF. The unit is now in the STANDBY mode.**
9. **Press the TIMER REC/WAKE-UP button until the timer indicator (⏲ REC) lights. The mode then changes to the Check mode.**

To cancel:
After setting or during setting, press the TIMER REC/WAKE-UP button until the timer indicator (⏲ REC) goes out.

- Either Wake-up timer or Timer recording setting is possible, but not both.
- After timer recording is performed once, settings are canceled.
- When you want to change the timer recording settings or when you make a mistake during setting, repeat setting procedures from the beginning.
- If you press the TIMER REC/WAKE-UP button during timer operation, timer operation is canceled.

NOTE:
During Standby, press the DISPLAY CLOCK ADJ button to confirm timer settings. Remember that pressing the TIMER REC/WAKE-UP button changes settings.

SLEEP TIMER



- Power turns off automatically after the specified time has elapsed.
- Can be operated with the remote control unit.
  Each time the SLEEP button is pressed, the setting changes in the following sequence:

AUTO (AUTO SLEEP) (Except for the FM/AM and AUX/CDII) → SLEEP 90 (90 min) → SLEEP 60 (60 min) → SLEEP 30 (30 min) → SLEEP off (0) → AUTO

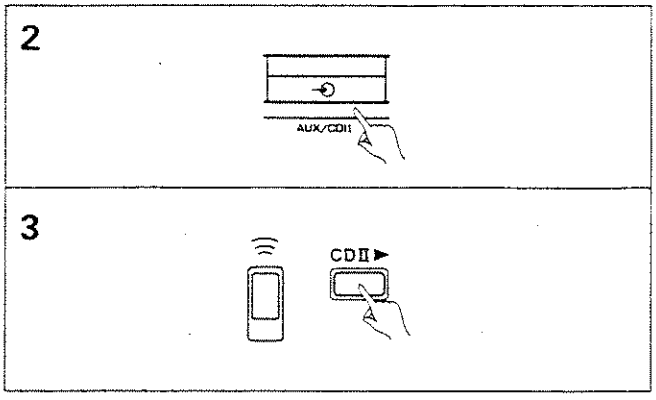
NOTE:
If you press the SLEEP button during Sleep operation, the time remaining till the power turns off is displayed. Do not press the SLEEP button when the remaining time is displayed. Otherwise, the setting changes and the sleep timer cannot function properly.

AUTO SLEEP

- If you press the SLEEP button during CD play, tape playback, or during recording, and select "AUTO", power is automatically switched OFF a few minutes after the CD or tape stops playing, or recording finishes.
- If AUTO SLEEP is used during relay playback, power automatically switches OFF after playback of two sides when only one cassette tape is loaded, and after playback of four sides when two cassette tapes are loaded.
- You cannot select AUTO SLEEP during CD REPEAT play.
  During CD play: AUTO SLEEP operation changes depending on the mode as follows.

ALL	: Power automatically switches OFF after the 25th CD finishes playing.
SINGLE	: Power automatically switches OFF after the CD currently playing finishes.
5 disc access	: Power automatically switches OFF after 5 disc access mode play finishes.

CONNECTING ANOTHER UNIT TO THIS UNIT



• If you connect a Pioneer CD player that has a control jack, you can use this unit's remote sensor.

1. **Connect this unit to a other unit (Pioneer CD player, etc(p.5)).**
2. **Press the AUX/CD II function button.**
3. **Operate the unit.**
   In case of a Pioneer CD player, operate with this unit's remote control CD II play button or with the CD player's remote control.
   Refer to the other unit's operating instructions for details concerning operation.

NOTES:
- *If the function is not set to AUX/CD II, the connected other unit cannot be operated.*
- *If the output jack of the other unit is not connected to this unit's IN (AUX/CD II) jack, the other unit cannot be operated.*

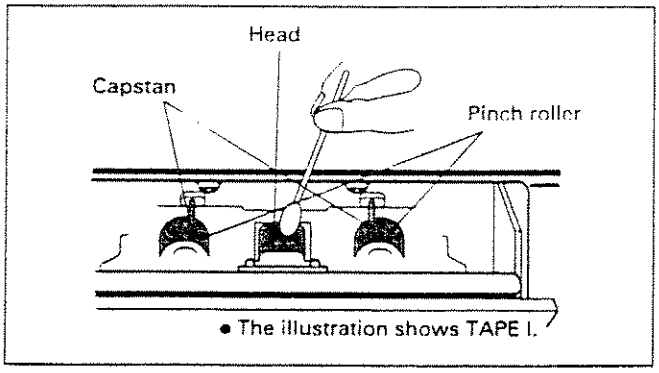
MAINTENANCE

Cleaning the head section

The heads, capstan and pinch roller are parts which are liable to get dirty quite easily. In particular, if the heads are dirty, the high frequency components of the sound will not be reproduced and the stereo balance will be impaired, resulting in a deterioration of sound quality. It is therefore recommended that the head section be cleaned regularly.

1. Turn the power off.
2. Press the Eject button ≙ to open the cassette door.
3. Dip a cleaning swab into head cleaning fluid and use it to wipe the head, capstan, and pinch rollers. Wait 2-3 minutes until the cleaning fluid dries.

NOTE:
This unit uses a head-slant standby system, with the result that the heads are mounted at an angled position.



• The illustration shows TAPE I.

Demagnetizing the cassette deck heads

The deck heads may become magnetized after the deck has been used for a long period of time, or if a magnet or other magnetized object (screwdriver, etc.) is brought near the heads. Magnetization of the heads results in increased noise and reduced ability to reproduce high-frequency sounds.
In this case, please use a commercially available head demagnetizer at regular intervals to eliminate the magnetic field on the heads. When using a head demagnetizer, turn this unit's power switch ON. In order to prevent adverse effects on the receiver and speakers, however, **be sure to turn down the receiver's volume control to its lowest position,** and disconnect any headphones from their headphones jack. For details, consult the instructions accompanying your head demagnetizer.

Maintenance of external surfaces

- Use a polishing cloth or dry cloth to wipe off dust and dirt.
- When the surfaces are dirty, wipe with a soft cloth dipped in some neutral cleanser diluted five or six times with water, and wrung out well, and then wipe again with a dry cloth. Do not use furniture wax or cleaners.
- Never use thinners, benzine, insecticide sprays or other chemicals on or near this unit, since these will corrode the surfaces.

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

	Symptom	Cause	Remedy
General	**No sound from speakers.**	• AC cord is unplugged. • All cords are not connected firmly. • Function is not set to the desired listening source on the receiver.	• Plug power cord into wall socket correctly. • Connect cords correctly referring to "CONNECTIONS", see page 5. • Select the correct function.
Cassette deck	**Cassette door does not open.**	• The power cord was unplugged while tape was running.	• Plug in the power cord.
	Cannot record.	• Erasure prevention tabs are broken off.	• Use a cassette tape that can be recorded on, or apply adhesive tape over tab holes.
	Sound is muffled. Previously recorded sounds remain.	• Dirty heads.	• Clean heads, see page 30.
	Sound is muffled. Treble tones too strong.	• Tape recorded with DOLBY NR but played without.	• Turn on DOLBY NR system for tapes recorded with DOLBY NR.
	Music search (MS) does not work.	• The unrecorded interval between tracks is shorter than 4 seconds.	• Use the function with tapes having 4 second intervals between tracks.
CD player	**Playback does not start.**	• Disc is loaded with label side to the left. • Dirt, blur, etc. on the disc. • Disc has bad scratch or warp.	• Load a disc correctly with the label side (printed side) to the right. • Clean the disc. • Replace the disc.
	The door panel doesn't open even when the 25 OPEN/CLOSE button is pressed.	• A disc is playing. • The button was pressed during disc search or within 10 seconds after a disc stopped playing.	• Stop disc play, and wait 10 seconds or more. • Press the Stop button and wait 10 seconds or more.
	A connected CD player doesn't operate.	• The function is not set to external input (AUX/CD II).	• Set the function to external input (AUX/CD II).
Tuner	**Sound is distorted.**	• Antenna is not connected. • Antenna is in poor position. • Interference from nearby fluorescent light, hair dryer, or other electrical appliance.	• Connect the antenna correctly. • Change antenna's position. • Stop using device causing interference.
	There is no stereo sound.	• The MONO indicator in the display window on the receiver lights up.	• Press MONO so that the MONO indicator goes out, see page 11.
Others	**Timer does not work.**	• Current time is not set.	• Set current time.
	Remote control unit does not work.	• Batteries are run down. • A fluorescent light is shining on the remote sensor window.	• Replace with new batteries. • Move the unit away from the fluorescent light.
	In the one-touch karaoke mode, noise is heard when using microphone.	• Interference from nearby fluorescent light, hair dryer, or other electrical appliance.	• Stop using device causing interference.

Abnormal functioning of this unit may be caused by static electricity or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

To change the frequency step

The frequency step (AM: 9 kHz/10 kHz, FM: 50 kHz/100 kHz) is preset depending on the area. If you need to change the step, follow the next procedure.

1. **Turn off the power.**
2. **While pressing the FREQ/STATION button, turn on the power.**

Repeat 1-2 to reset the frequency step.

SPECIFICATIONS

■ STEREO FILE-TYPE CD CASSETTE DECK RECEIVER

Amplifier Section

Continuous Power Output (RMS)
XR-P970F
FRONT ..... 100 W + 100 W
(1 kHz, T.H.D. 10 %, 8 Ω)
CENTER, REAR ..... 20 W
(1 kHz, T.H.D. 10 %, 4 Ω)
XR-P770F ..... 100 W + 100 W
(1 kHz, T.H.D. 10 %, 8 Ω)

FM Tuner Section

Reception frequencies ..... 87.5 MHz to 108 MHz
Antenna input ..... 75 Ω unbalanced

AM Tuner Section

Reception frequencies ..... 531 kHz to 1,602 kHz (9 kHz step)
530 kHz to 1,700 kHz (10 kHz step)
Antenna ..... Loop antenna (included)

Double Cassette Deck Section

System type ..... 4-track, 2-channel stereo
Heads ..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor ..... DC servo motor x 1
Frequency response
Type II (High/CrO_2) tape ..... *35 Hz to 15,000 Hz ±6 dB
(recorded at –20 dB)
Type I (Normal) tape ..... *35 Hz to 14,000 Hz ±6 dB
(recorded at –20 dB)
SN ratio ..... *56 dB
(peak recording level, audible compensation)
Dolby B type NR on ..... 10 dB compensation at 5 kHz

* Values measured in accordance with EIAJ standards.

■ FILE TYPE CD PLAYER

Type ..... Compact disc audio system
Usable discs ..... Compact audio discs
Channels ..... 2 channels (stereo)
Program steps ..... 32 steps maximum

■ ELECTRICAL REQUIREMENTS, ETC.

Power Requirements ..... AC 240 V, 50 Hz
Power Consumption
XR-P970F ..... 510 W
XR-P770F ..... 530 W
External dimensions ..... 260 (W) x 310 (H) x 371.5 (D) mm
Weight ..... 11 kg

■ SPEAKER SYSTEMS: S-P770V

Enclosure ..... Bass-reflex bookshelf type
System ..... 15 cm 3-way system
Loudspeakers (Magnetically shilded type):
Woofer ..... 15 cm cone type
Mid-range ..... 5.2 cm cone type
Tweeter ..... 2 cm dome type
Nominal Impedance ..... 8 Ω
Maximum power ..... 100 W
Dimensions ..... 200 (W) x 310 (H) x 292 (D) mm
Weight ..... 4.2 kg

■ ACCESSORIES

Operating Instructions 1
FM T-type antenna 1
AM loop antenna 1
Remote control unit 1
AA/R6P dry cell batteries 2
Speaker cords (supplied with speaker system) 2
CD case stand 1

NOTE:
Specifications and design are subject to possible modifications without notice, due to improvements.

■ SPEAKER SYSTEMS : S-P33LRC (Center x 1, Surround (rear) x 2) (XR-P970F only)

Enclosure
Center ..... Closed-box type, Magnetically, shilded
Surround (rear) ..... Closed-box type
System ..... 8.7 cm 1-way system
Landspeaker ..... 8.7 cm cone type
Nominal Impedance
Center ..... 8 Ω
Rear ..... 16 Ω
Maximum power ..... 20 W
Dimentions ..... 180 (W) x 130 (H) x 91 (D) mm
Weight (1pc.without package) ..... 0.6 kg

Switching between displays

You can switch between displays by pressing the SFC/KARAOKE button when power is OFF.

Mode A (regular display) → Mode B (subdued display) → Mode A

Published by Pioneer Electronic Corporation.
Copyright © 1996 Pioneer Electronic Corporation.
All rights reserved.

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
PIONEER ELECTRONICS [USA] INC. P.O. BOX 1540, Long Beach, California 90801-1540
PIONEER ELECTRONICS OF CANADA, INC. 300 Allstate Parkway, Markham, Ontario L3R 0P2, Canada
PIONEER ELECTRONIC [EUROPE] N.V. Haven 1087, Keetbergiaan 1, 9120 Melsele, Belgium TEL: 03/570.05.11
PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia, TEL: [03] 9586-6300
PIONEER ELECTRONICS DE MEXICO S.A. DE C.V. San Lorenzo Num 1009 3er piso Desp. 302 Col. Del Valle, Mexico D.F. C.P. 03100 TEL: 5-688-52-90

<96I01ZF3ZO3>

Printed in Japan <ARB7104-A>

12.2 CASSETTE MECHANISM MODULE

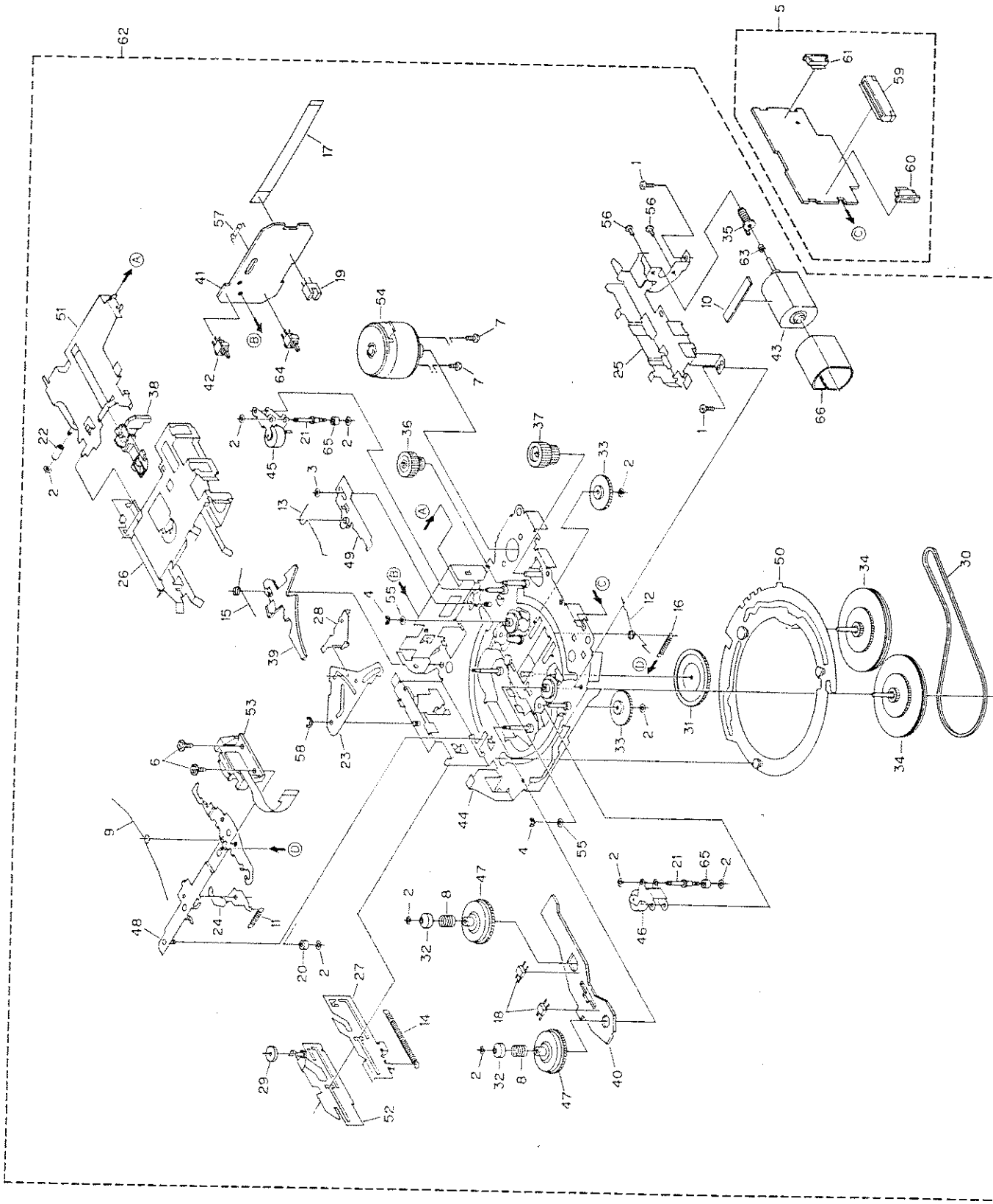


Fig. 1

● Parts List

Mark No.	Description	Part No.
1	Screw	BSZ20P040FMC
2	Washer	CBF1037
3	Washer	CBF1038
4	Washer	CBG1003
5	Deck Unit(KEH-P7400/UC)	CWM4528
	Deck Unit(KEH-P7450/ES)	CWM4527
6	Screw	EBA1028
7	Screw	EBA1037
8	Spring	EBH1531
9	Spring	EBH1512
10	Cushion	ENM1034
11	Spring	EBH1515
12	Spring	EBH1587
13	Spring	EBH1517
14	Spring	EBH1518
15	Spring	EBH1519
16	Spring	EBH1537
17	Cord	EDD1015
18	Photo-reflector(EGN2,3)	EGN1004
19	Photo-interrupter(EGN1)	EGN1005
20	Roller	ENR1031
21	Shaft	ELA1362
22	Roller	ELA1348
23	Arm	ENC1396
24	Arm	ENC1397
25	Guide	ENC1398
26	Holder	ENC1417
27	Lever	ENC1448
28	Arm	ENC1401
29	Roller	ENR1027
30	Belt	ENT1027
31	Gear	ENV1347
32	Collar	ENV1349
33	Gear	ENV1350
34	Flywheel	ENV1410
35	Worm Gear	ENV1439
36	Worm Wheel	ENV1440
37	Gear	ENR1028
38	Lever	ENV1442
39	Arm	ENV1445
40	Gathering P.C.Board	ENX1029
41	Gathering P.C.Board	ENX1030
42	Switch(S1)	ESG1004
43	Motor Unit(M2)	EXA1382
44	Chassis Unit	EXA1476
45	Pinch Roller Unit	EXA1472
46	Pinch Roller Unit	EXA1473
47	Reel Unit	EXA1386
48	Head Base Unit	EXA1434
49	Lever Unit	EXA1438
50	Gear Unit	EXA1389
51	Frame Unit	EXA1459
52	Lever Unit	EXA1439
53	Head Assy(HD1)	EXA1404
54	Motor Unit(M1)	EXA1428
55	Washer	HBF-179
56	Screw	JGZ20P025FNI
57	Resistor(R1)	RD1/4HM181J
58	Washer	YE20FUC
59	Connector(CN251)	CKS1711
60	Connector(CN252)	CKS2127
61	Connector(CN253)	CKS2129
62	Spare Unit(KEH-P7400/UC)	EXA3003
	Spare Unit(KEH-P7450/ES)	EXA3001
63	Spring	EBH1545
64	Switch(S2)	ESG1004
65	Roller	ENR1023
66	Shield	ENC1410

ig. 15

12. EXPLODED VIEW AND PARTS LIST

12.1 CHASSIS

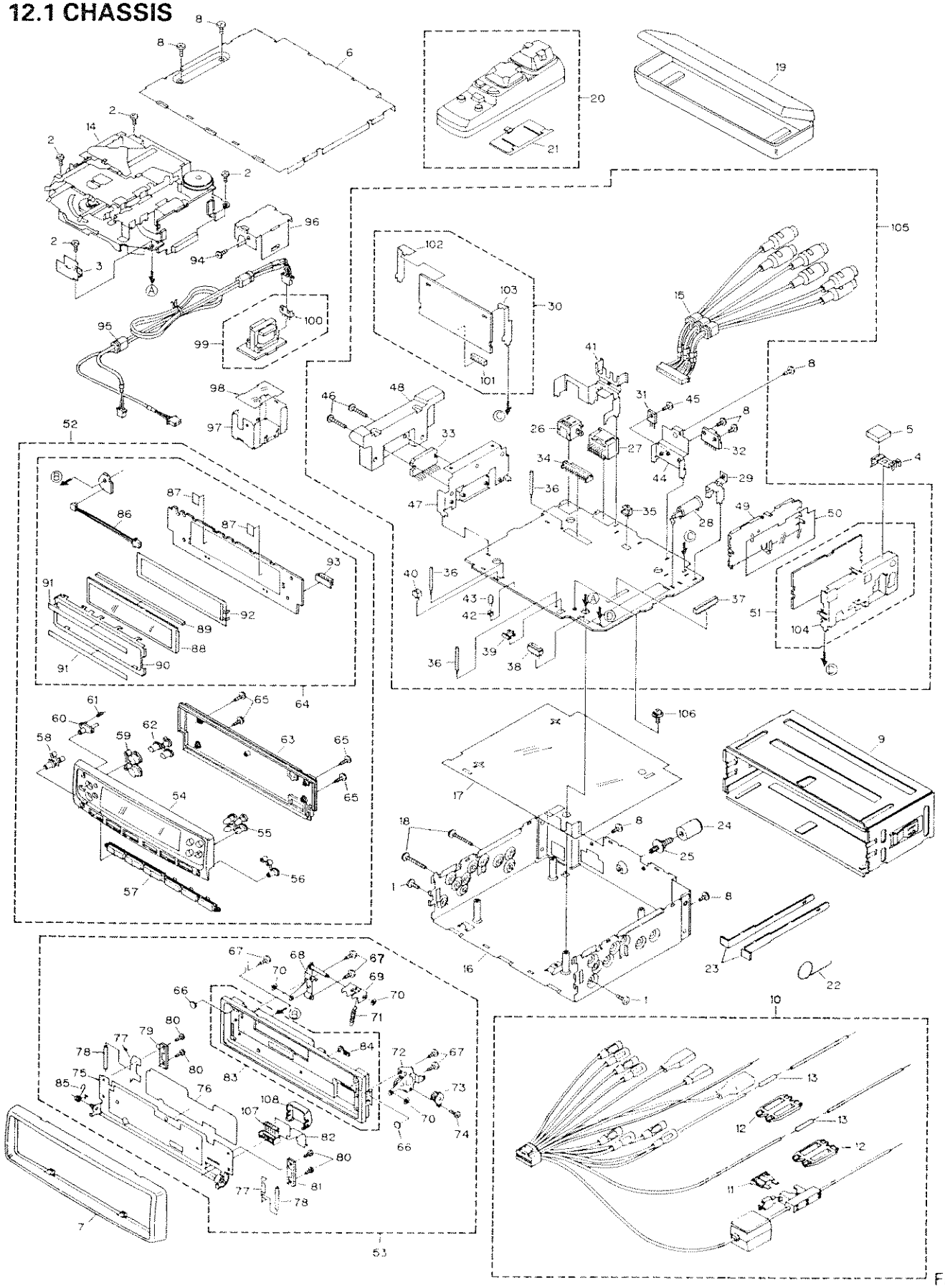


Fig. 14

NOTE:

● Parts marked by "*"are generally unavailable because they are not in our Master Spare Parts List.

● Parts List

Mark No.	Description	Part No.
1	Screw	BMZ30P040FMC
2	Screw	BSZ26P050FMC
3	Holder	CNC6357
4	Earth Board	CNC6681
5	Spacer	CNM4913
6	Case	CNB2028
7	Panel	CNS3113
8	Screw	BSZ30P060FMC
9	Holder	CNC4946
10	Cord Assy(KEH-P7400/UC)	CDE5011
	Cord Assy(KEH-P7450/ES)	CDE4891
11	Fuse	CEK1136
12	Cap	CNS1472
13	Resistor	RS1/2P102JL
14	Cassette Mechanism Module (KEH-P7400/UC)	EXK3130
	Cassette Mechanism Module (KEH-P7450/ES)	EXK3110
15	Cord(KEH-P7400/UC)	CDE4383
	Cord(KEH-P7450/ES)	CDE4898
16	Chassis Unit	CXA8952
17	Insulator	CNM4686
18	Screw	BSZ30P200FMC
19	Case Assy	CXA7194
20	Remote Control Assy	CXA9127
21	Cover	CNS3477
22	Spring	CBH-865
23	Handle	CNC5395
24	Bush	CNV1009
25	Screw	CBA1284
26	Connector(CN601)	CKS3408
27	Plug(CN607)	CKM1187
28	Antenna Jack(CN402)	CKX1006
29	Holder	CNC4569
30	·····	
31	Transistor(Q621)	2SD1189
32	IC(IC604)	PA2024A
33	IC(IC321)	PAL003A
34	Plug(CN351)(KEH-P7400/UC)	CKS1246
	Plug(CN351)(KEH-P7450/ES)	CKS1242
35	Plug(CN605)	CKS1222
36	Clamper	CEF1005
37	Connector(CN241)	CKS1730
38	Connector(CN603)	CKS2239
39	Plug(CN604)	CKS1236

Mark No.	Description	Part No.
40	Plug(CN608)	CKS-783
41	Holder(KEH-P7400/UC)	CNC6644
	Holder(KEH-P7450/ES)	CNC6492
42	Holder	CNV1906
43	Lamp(IL609)	CEL1263
44	Holder	CNC5491
45	Screw	BSZ30P080FMC
46	Screw	BSZ26P160FMC
47	Holder	CNC6361
48	Heat Sink	CNR1419
49	Holder	CNC6356
50	Insulator	CNM4684
51	FM/AM Tuner Unit	CWE1417
52	Detach Grille Assy (KEH-P7400/UC)	CXA8933
	Detach Grille Assy (KEH-P7450/ES)	CXA8934
53	Panel Assy(KEH-P7400/UC)	CXA9417
	Panel Assy(KEH-P7450/ES)	CXA8938
54	Grille Unit(KEH-P7400/UC)	CXA8718
	Grille Unit(KEH-P7450/ES)	CXA8721
55	Button(DM,ID,BA,SW) (KEH-P7400/UC)	CAC4650
	Button(DM,•,BA,SW) (KEH-P7450/ES)	CAC4653
56	Button(F)	CAC4479
57	Button(1-12)(KEH-P7400/UC)	CAC4544
	Button(1-12)(KEH-P7450/ES)	CAC4545
58	Button(SO)	CAC4478
59	Button(+,-)	CAC4648
60	Button(-)	CAC4475
61	Spring	CBH1844
62	Button(<,>,S)	CAC4481
63	Cover Unit	CXA8707
64	Key Board Unit	CWM4756
65	Screw	BPZ20P080FZK
66	Cushion	CNM2247
67	Screw	BPZ20P050FMC
68	Holder Unit	CXA7161
69	Arm	CNC5495
70	Washer	CBF1001
71	Spring	CBH1395
72	Holder Unit	CXA7793
73	Damper Unit	CXA7159
74	Screw(M2x30)	CBA1077

Mark	No.	Description	Part No.
	75	Holder Unit	CXA7958
	76	Sheet	CNM4179
	77	Spring	CBH1528
	78	Roller	CLA2041
	79	Holder	CNV3964
	80	Screw(M2x30)	CBA1082
	81	Holder	CNV2141
	82	P.C.Board	CNP4440
	83	Panel Unit(KEH-P7400/UC)	CXA7441
		Panel Unit(KEH-P7450/ES)	CXA8724
	84	Clear Plastic Plate	CNV4479
	85	Spring	CBH1660
	86	Cord	CDE4387
	87	Film	CNM4349
	88	LCD	CAW1352
	89	Connector	CNV4430
	90	Holder	CNC6142
*	91	Spacer	CNM4957
	92	EL(EL901)	CEL1424
	93	Connector(CN901)	CKS2733
	94	Screw	BSZ26P050FMC
	95	Cord	MDE9001
	96	Holder	MNC9002
	97	Holder	MNC9001
	98	Insulator	MNM9001
	99	Inverter Unit	MWM9001
	100	Plug(CN101)	CKS1224
	101	Plug(CN151)	CKS1616
	102	Holder	CNC5713
	103	Holder	CNC6676
	104	Holder	CNC6555
	105	Tuner Amp Unit (KEH-P7400/UC)	CWM4744
		Tuner Amp Unit (KEH-P7450/ES)	CWM4746
	106	Screw	BSZ30P055FUC
	107	Connector(CN940)	CKS2780
	108	Cover	CNV3965